Content Rules Console User Guide

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About Mediasurface:

Mediasurface (UK, AIM: MSR) develops, markets and implements Web Content Management (WCM) software that help businesses take full advantage of the capabilities of the web by transforming the complex task of managing websites into straightforward activities.

Its flagship product Morello has changed the face of content management and is used to power sophisticated intranets, extranets, websites and other digital channels for enterprise clients such as The Home Office, Citigroup and Cancer Research UK, who delight in using it.

Pepperio is a one-stop-shop package for SME's exclusively offered by Mediasurface's network of accredited Pepperio partners, allowing smaller businesses to easily run a professionally designed website for a low fixed monthly fee.

Mediasurface operates through wholly owned subsidiaries and partners across Europe, USA and India. The company's HQ is Mediasurface House, Newbury Business Park, London Road, Newbury, Berkshire, RG14 2QA, UK, +44 (0)1635 262000. **www.mediasurface.com.**

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1   Getting started

1.1   Formatting and terminology

1.1.1   Bold font

Bold font is used for any Morello element, such as the name of a window, button, field, or tab.

1.1.2   Current

The word *current* is borrowed from CAD terminology. We use *current* as a convenient shorthand to refer to the Morello element that you are currently discussing. For example, Figure 1 shows one of a sequence of windows that are used to specify the properties of a named group (in this case, the **Movie Authors** group). We could say:

> The **Collection access tab** shows the collections that the user group whose name is specified in the **Name** field can access.

You might need to read that a few times to understand it.

What we would actually say is:

> The **Collection access tab** shows the collections that the current user group can access.
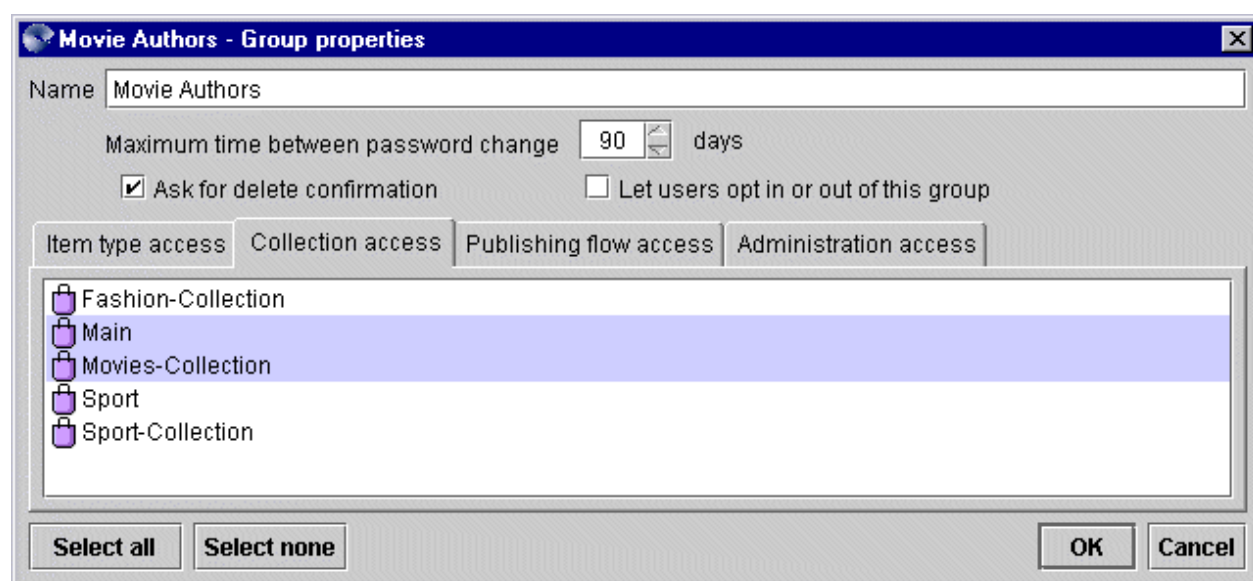
Figure 1. Granting collection access to a group

1.1.3   Selecting multiple elements from a list

You often need to select multiple elements from a Morello list. There are easy ways to select adjacent and non-adjacent elements.

To select adjacent elements:

1.   Select the first item in the range.

      The item is highlighted.

2.   Hold down the SHIFT key and select the last item in the range.

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All the elements in the range are highlighted.

To select non-adjacent elements:

1. Select the first element.

    The item is highlighted.

2. Hold down the CTRL key and select another element.

    That element is also highlighted.

3. Continue to hold down the CTRL key, and select other elements.

1.1.4   OK and Cancel buttons

Many Morello Content Rules Console (CRC) windows have **OK** and **Cancel** buttons. In any window that allows changes to be made, clicking **OK** causes any changes to be committed to the database.

Clicking **Cancel** causes any changes to be discarded. If you previously clicked **OK**, then only changes since you last clicked **OK** are discarded.

1.2   Launching Morello Content Rules Console

Launch the Morello CRC by clicking the Morello Content Rules Console icon on your Windows desktop.

Alternatively, you can use the following steps:

1. Click **Start** on the Windows task bar.
2. Click on **Programs**.
3. Click on the Mediasurface folder.
4. Click Morello Content Rules Console.

    The Morello login window appears.

1.3   Logging in to Morello CRC

When the Morello CRC login window appears, do the following:

1. Click in the **User ID** text box, and type your user ID.

    If you are the system administrator, the user ID at your first login is **msadmin**. (You can change this after you log in. Otherwise, type the user ID supplied by your system administrator.

2. Press TAB to move to the **Password** text box. Type in your password.

    If this is the first login after installation, the password is **mediasurface**. Passwords are case-sensitive, so remember which letters are upper case, and which are lower case.

3. Click on **Log in**.

    If your password has expired, you are presented with the **Set password** dialog box. You should change your password immediately. You can continue to use your expired password indefinitely, but this is obviously not desirable.

    If you have problems logging in, contact your system administrator.

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If your login is successful, the Morello CRC main window is displayed. The appearance of the window depends on your access rights. Users who can access more than one site will see the window shown in Figure 2. A user who can only access one site will see that site displayed, as in **Figure 3**
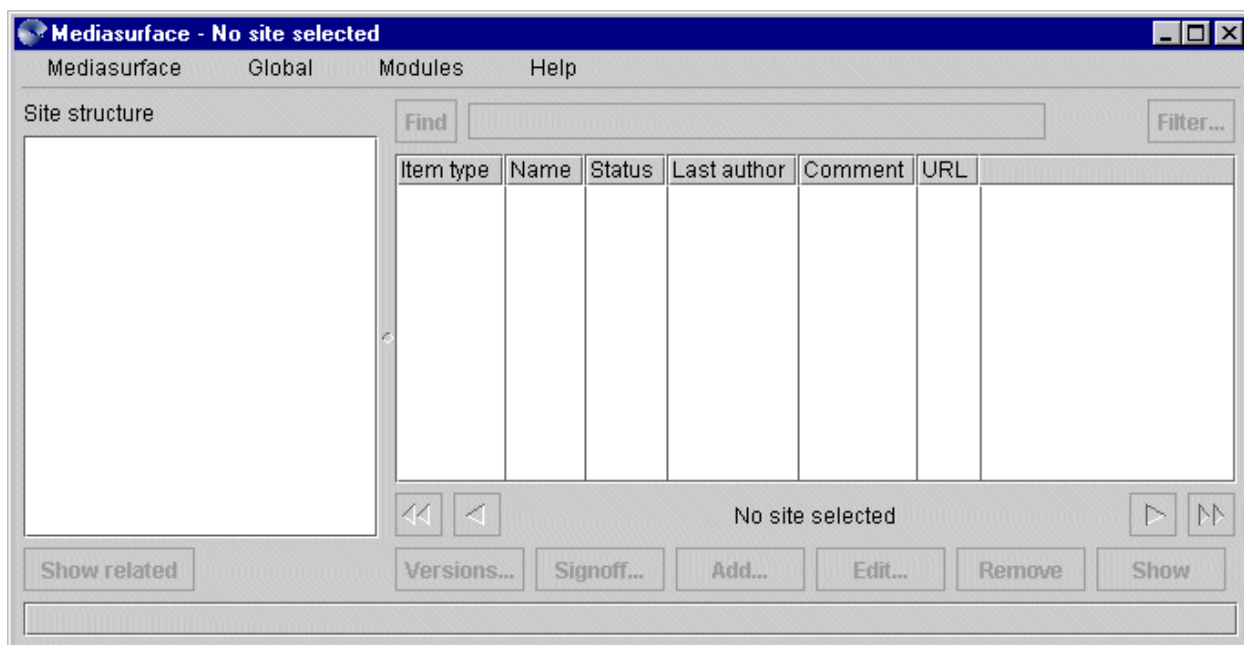
Figure 2. Morello CRC main window with no site selected
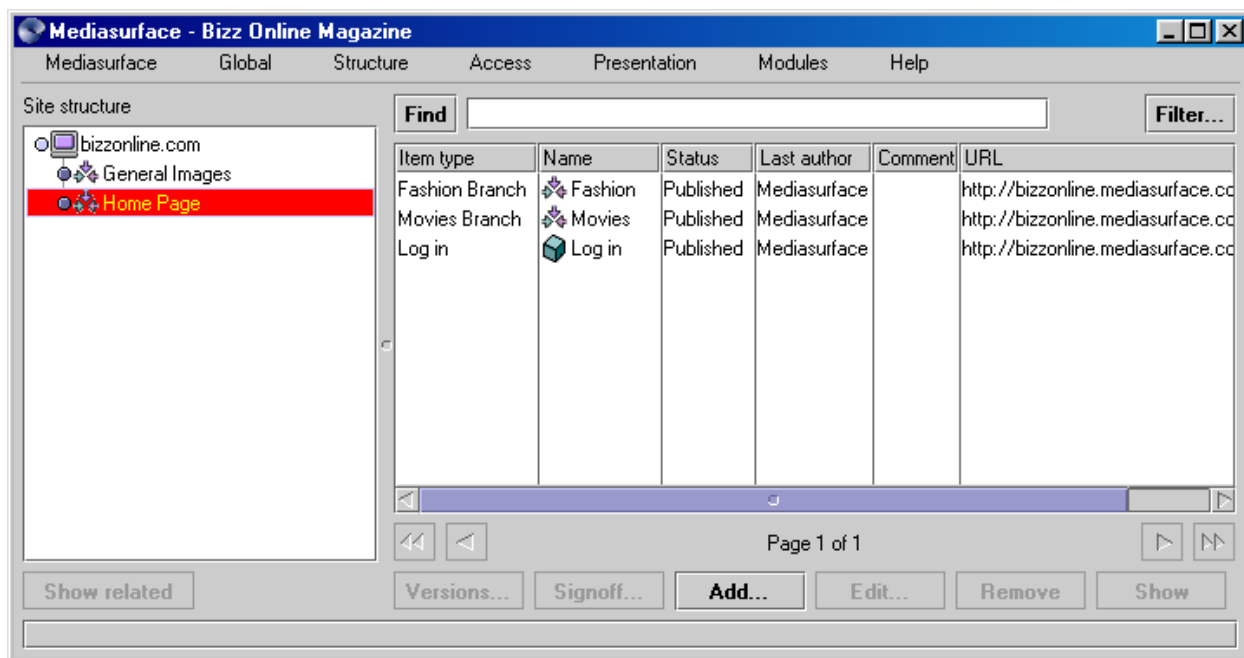
Figure 3. Morello CRC main window with a site displayed

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1.4   Logging off from Morello CRC

To logoff from Morello CRC, click the close button at the right of the title bar. You are asked whether you want to log off, or log on as another user.

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2   Understanding Morello elements

2.1   Understanding views and templates

The left side of Figure 4 shows a page from an imaginary Web site. The corresponding template is shown on the right side. The arrows show how each part of the template contributes to the appearance of the page.

Figure 4. Web page with its Dreamweaver template (public view)

In Morello, a Web page is represented by a *view*. By using Morello views, the site designer can arrange that different users see a Web page in different ways. For example, Figure 4 could represent the public view of the Jennifer Love Hewitt article, with the corresponding subscriber view being shown in Figure 5. The template for the subscriber view is also shown. You can see that some of the text in the subscriber view is the same as for the public view, but appears in a different position on the page. The subscriber view has some additional text.

(In this manual, all Web pages have visible cell borders. This allows us to show, in later sections, how each item on the page is handled by Morello.)

Different views of the same Web page are implemented using different templates. The content author provides only one set of content for these pages, without needing to know which content will appear on which page. The template presents the appropriate content according to the view being displayed.

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Figure 5. Web page with its Dreamweaver template (subscriber view)

2.2   Understanding Items

The underlying content behind each view of a Web page is referred to in Morello as an *item*. The item is what the content author creates or edits. Figure 6 shows how content is entered into the **Item properties** window for the Jennifer Love Hewitt article. The text for field **Section1** is displayed. Look again at Figure 4 and Figure 5, and you will see where **Section1** appears in the templates, with the corresponding text on the Web page.

2.3   Understanding item types

In Morello, items are based on item types. At the top right of Figure 5, you can see that the Jennifer Love Hewitt article is of the type **Movie Article**. All items of this type will have identical properties. For example, they will all contain the same fields, such as **Author's name** and **Section1**.

The use of item types is a time-saver. Once you create an item type having specific characteristics, you can create any number of items based on that item type. Each item inherits all the characteristics of the item type on which it was based. If you later modify the characteristics of an item type, all items based on that type will reflect the changes.

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Items based on the same item type could have the following identical characteristics:

- Banner.
- Preset text, such as a copyright notice, assigned to a function key.
- Attachment point to the site structure.
- Look and feel of the page – the layout of text, the position and size of graphics, the position of links, and so on.
- The publishing flow for each item – new, edited, reviewed, published, and so on.
- Text inserted from database records.
- Restrictions on who can view, who can edit, who can sign off, and so on.
- Restrictions on which multimedia items can be inserted in a page.
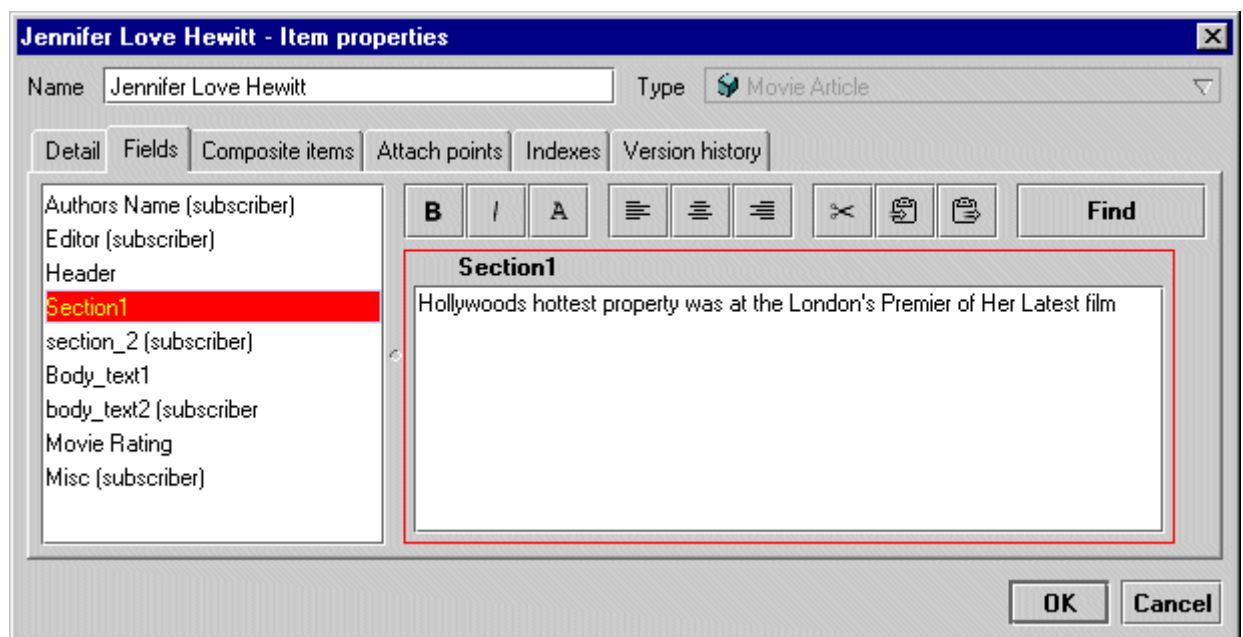
Figure 6. Entering content in an item

2.4   The Bizz home page

Figure 7 shows the home page for our imaginary Web site. This simple site represents an online magazine covering fashion and movies. The home page has links to a fashion page and a movies page, and there is a link to a login page for subscribers. The home page is referred to as a branch page

Part of the site structure is shown schematically in Figure 8. The Movies Page shows an example of a link to a public page and a subscriber page.

2.5   Understanding leaves, branches, and items

We can use Figure 8 to define some terms used in Morello.

The site structure consists of *branch* items and *leaf* items. Branch items can be attached to other branch items. At the end of the branch structure are the leaf items. In principle, leaf items contain no links, because they are at the end of the chain. In practice, it is often useful to link a leaf item in one part of the site structure to a related leaf

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item in a totally different part of the structure. In Morello we do this by creating *related items* that are then
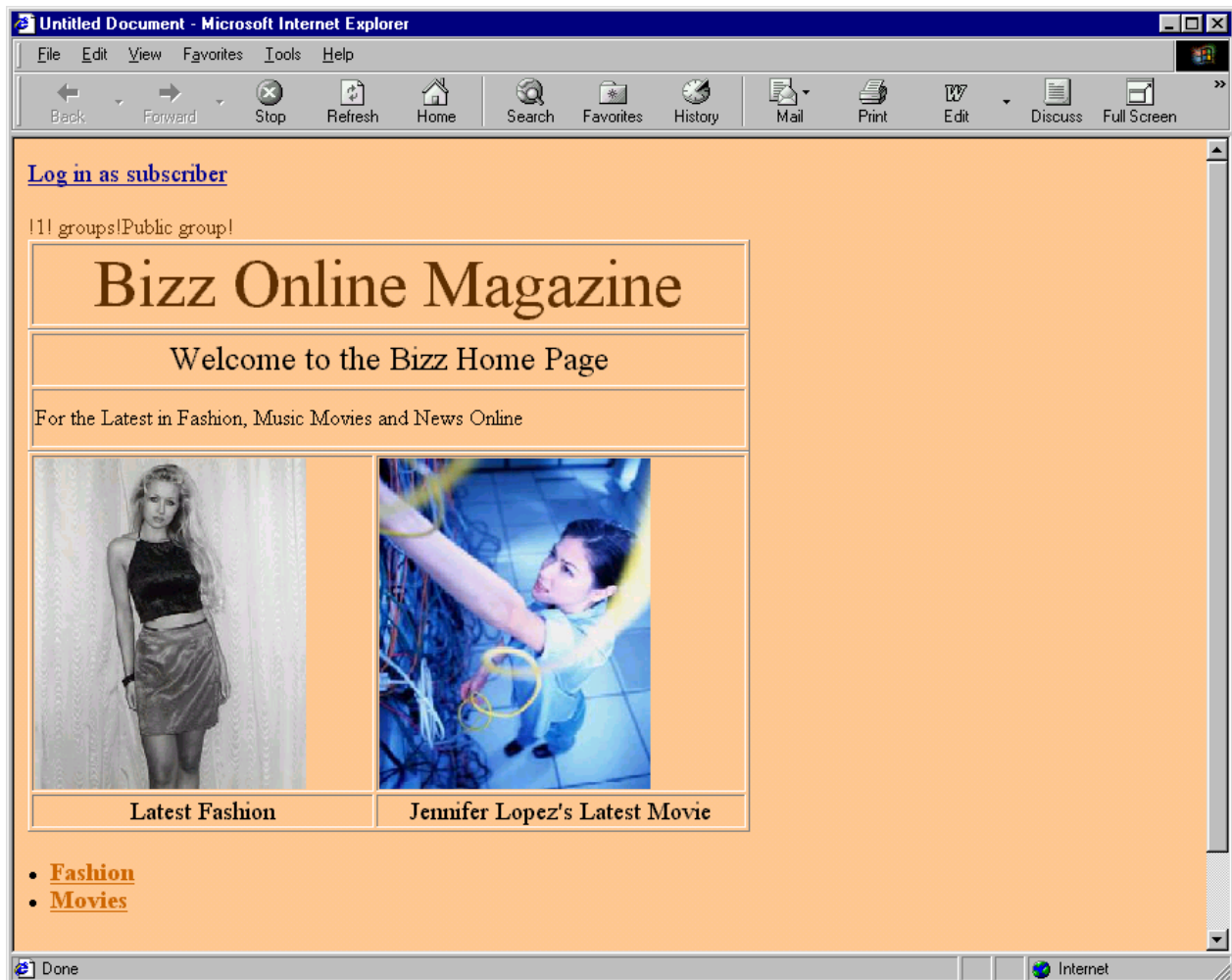
automatically linked to each other.

Figure 7. Bizz home page
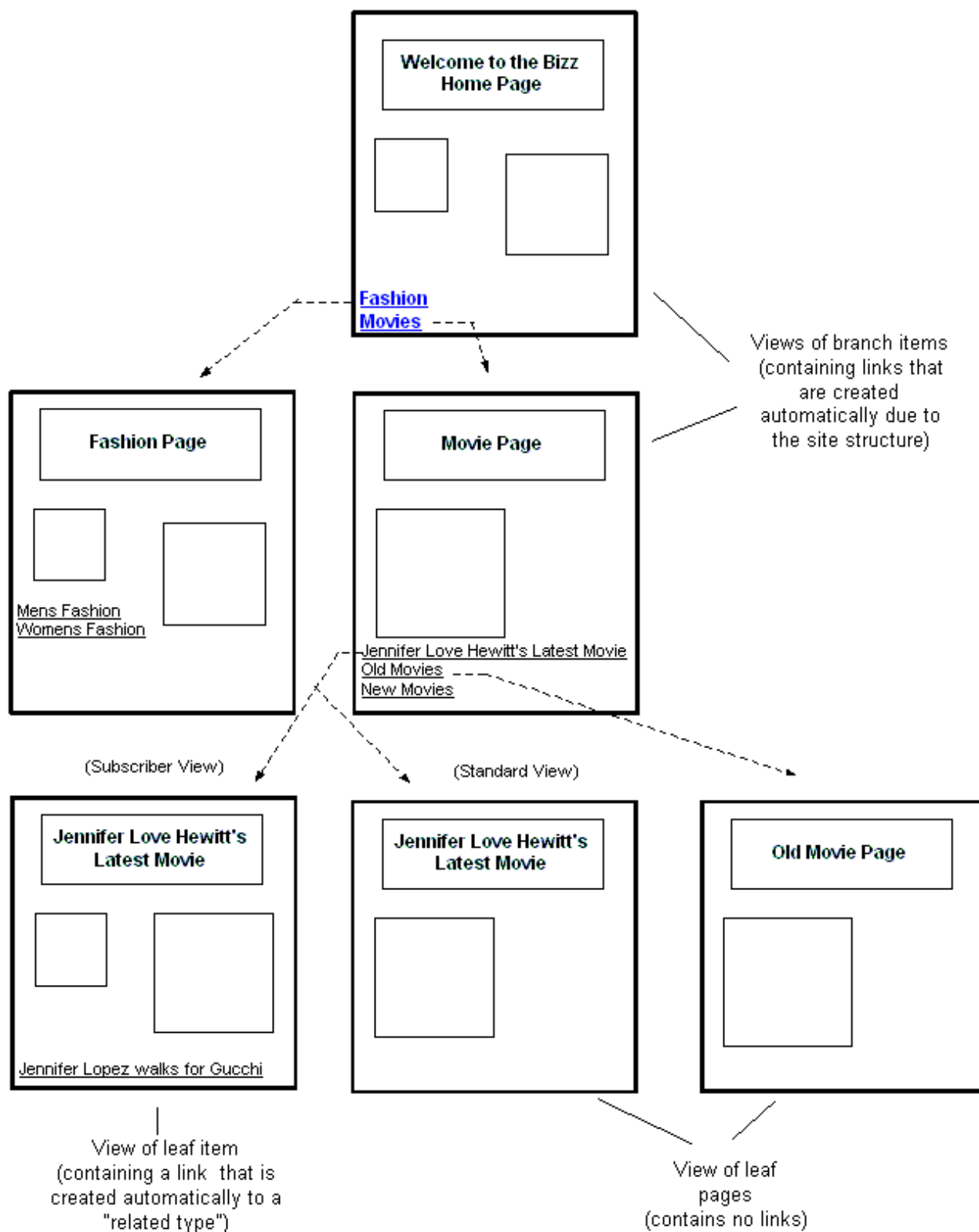
Figure 8. Partial structure of Bizz Web site

2.6   How the Bizz Web site looks in Morello

The Morello representation of the Bizz Web site is shown in Figure 9. The left pane, with **Home Page** highlighted shows that there are two branches attached to the home page: **Fashion** and **Movies**. The same two branches are shown in the right pane, which also shows the leaf **Log in**. This method of showing leaves and branches is similar to the method used in Windows Explorer, where only directories are shown in the left pane, and both directories and files are shown in the right pane.
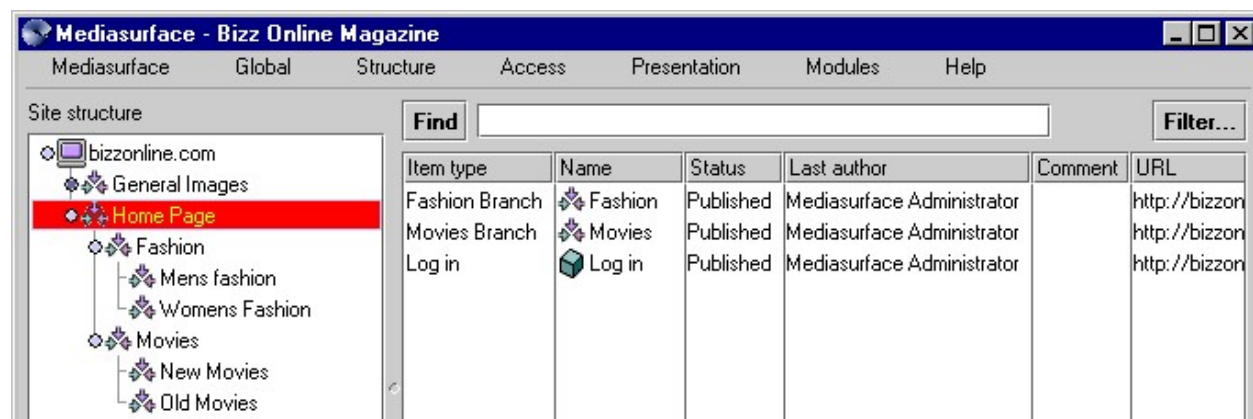
Figure 9. The Bizz Web site in Morello.

Figure 10, with **Movies** highlighted shows that the **Movies** page has links to two branches, **New Movies** and **Old Movies**. The right pane shows, in addition, a **Movie Article**. The **Movies** page, therefore, contains three links. This is also shown in Figure 8.

You can see from Figure 10 that the branch pages **New Movies** and **Old Movies** are both based on the **New Movies Branch** item type. The **Jennifer Love Hewitt** article is based on the **Movie Article** item type.
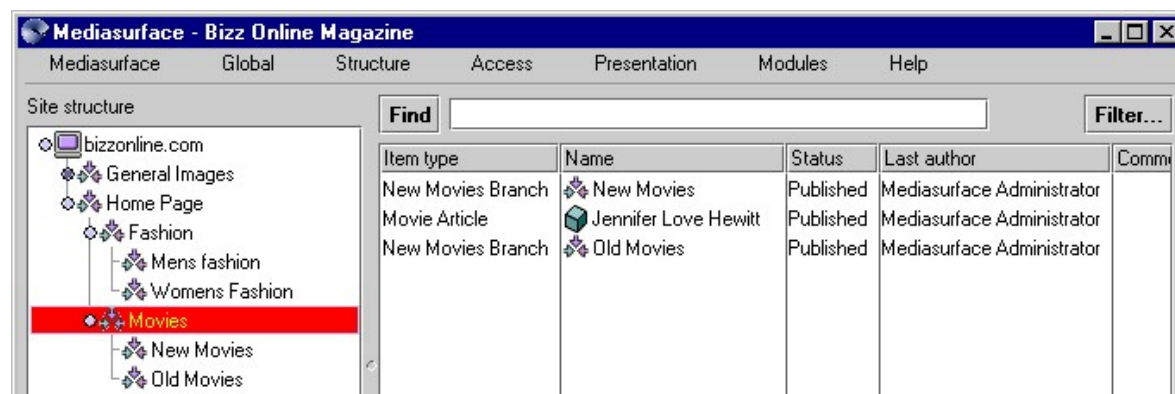
Figure 10. Movies branches and leaves.

2.7   More about templates
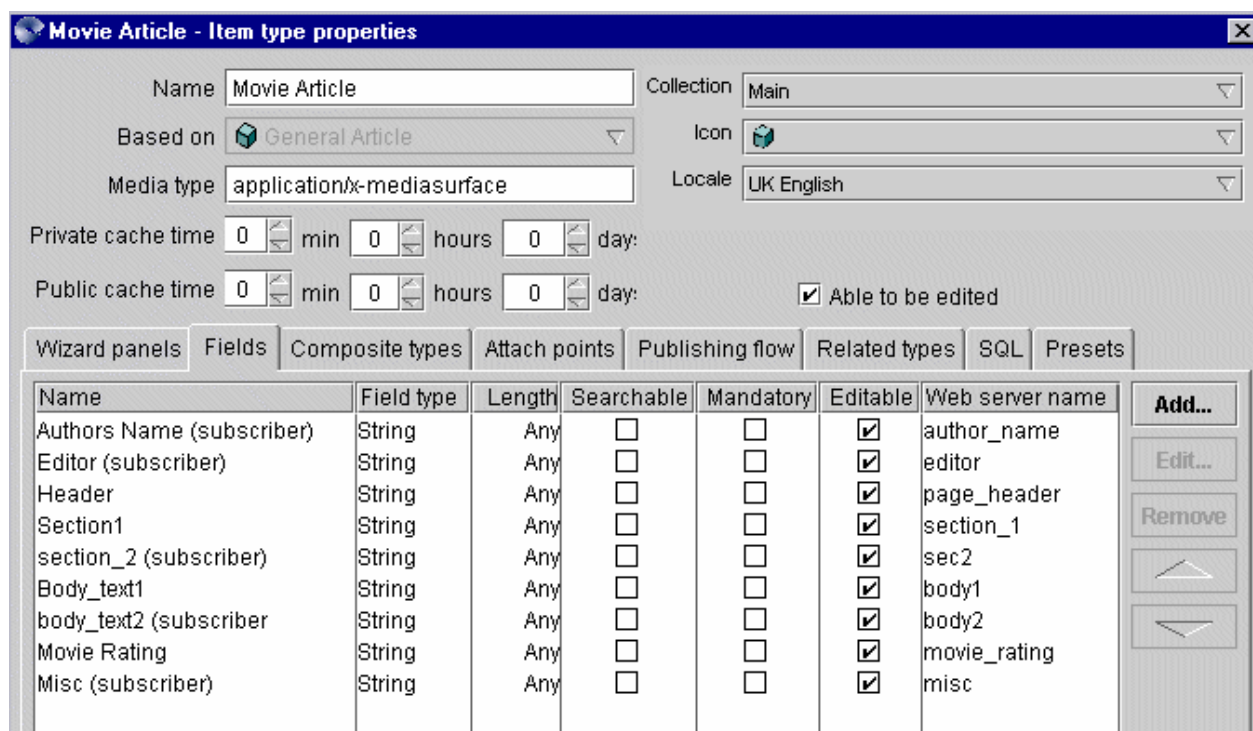
In Morello, remember that Web pages are views. Views are based on templates, and templates are based on item types. This means that you don't need to create a template for each page. You simply create at least one template for the *item type*. Then each Web page based on that item type will automatically use the correct template.

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The templates shown in Figure 4 and Figure 5 were created in Dreamweaver. If they look daunting, don't worry. These templates were produced mainly by point and click, with very little typing. You don't need to know anything about template programming. (The Dreamweaver module must be purchased and installed separately. The Morello Dreamweaver Integration only works with Dreamweaver versions 3 and 4 and Dreamweaver Ultradev version 4

Before we show you how this template was created, look at Table 1, which shows where each Dreamweaver element comes from.

Dreamweaver Element	Source	Comments
Bizz Online Magazine	This is a Morello component called **Banner**.	Refer to Figure 15, page 14.
\<head\>Untitled Document \</head\>	This is automatically inserted by Dreamweaver.	This is the text on the Web page title bar. You can edit this text.
`$item{'page_header'}`	This comes from a Morello field called **Header** in the item type **Movie Article**. At the Web server, the field is called **page_header**.	Refer to Figure 11, page 12.
`$item{'section_1'}`	This comes from a Morello field called **Section1** in the item type **Movie Article**. At the Web server, the field is called **section_1**.	Refer to Figure 11, page 12.
`str_inlines(undef, undef, undef, undef, undef, 'Movie actors')`	This allows any multimedia item that has its composite type **Movie actors** to be inserted by a content author.	Figure 12, page 12, shows that **Movie Actors** has been assigned to **Movie Article**. Figure 13, page 13, shows that **hewit161.jpg**, of type **Movie Actors**, is to be inserted into the article called **Jennifer Love Hewitt**.
`$item{'body1'}`	This comes from a Morello field called **Body_text1** in the item type **Movie Article**. At the Web server, the field is called **body1**.	Refer to Figure 11, page 12.
Movie Rating = `$item{'movie_rating'}`	This comes from a Morello field called **Movie Rating** in the item type **Movie Article**. At the Web server, the field is called **movie**. The text "Movie Rating = " was typed by the template designer.	Refer to Figure 11, page 12.
`str_relations()`	This entire string, including the opening and closing `, was typed by the template designer. (The character ` is normally at the top left of a standard keyboard.)	The Perl function, **str_relations**, inserts a link to each item that is related to **Jennifer Love Hewitt**. Figure 14, page 14 shows that the content author has related **Jennifer Love Hewitt** to **Jennifer Lopez Walks for Gucchi**, but not to **New Paris Collection**. So only one link appears on the Web page.

Table 1

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Figure 11. Morello fields that can be inserted in Dreamweaver template

Figure 12. The composite types that are assigned to the item type called Movie Article
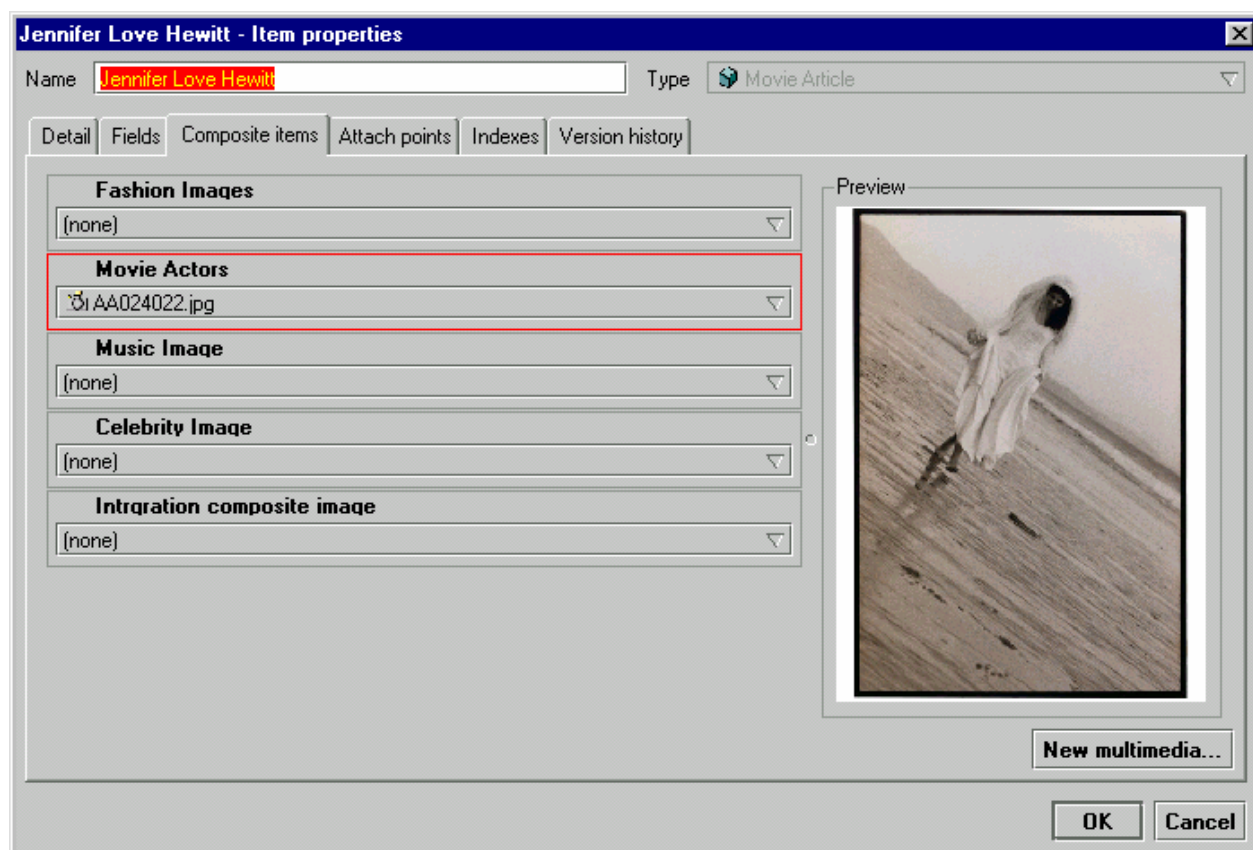
Figure 13. The JPEG image, hewit161jpg is assigned to the item called Jennifer Love Hewitt
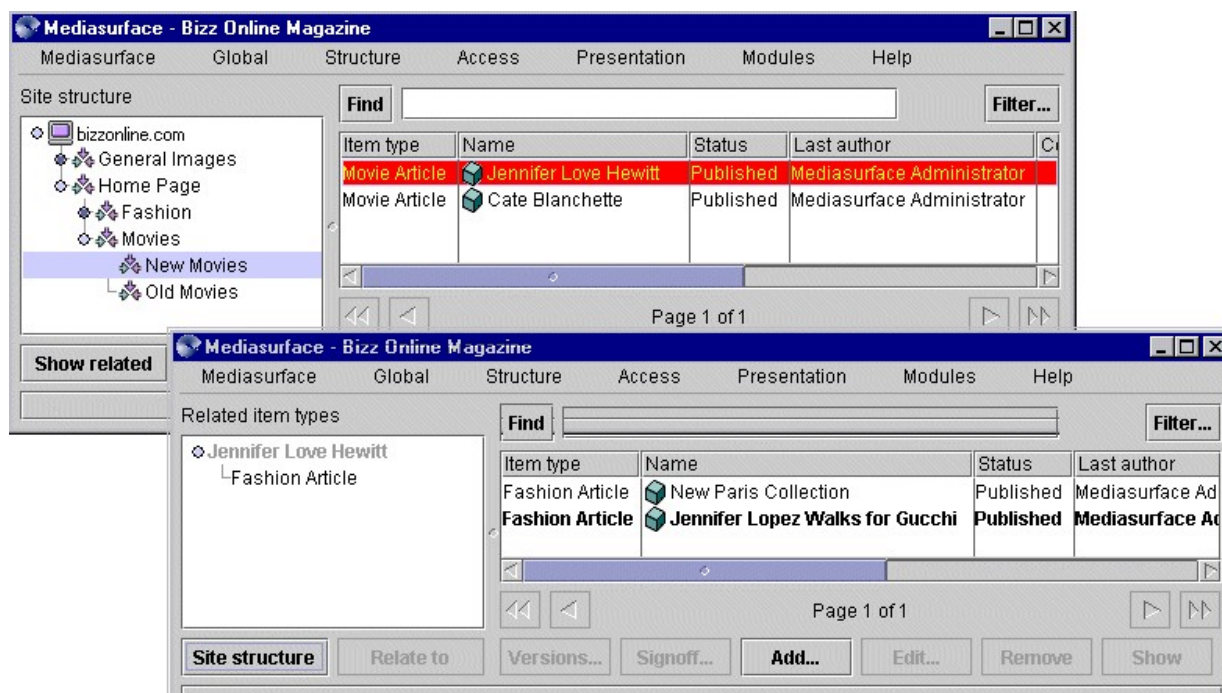
2.8 Understanding components and categories

Components are frequently-used code fragments that you can insert into templates, and into other components. For example, you can insert HTML, Perl, and Javascript. In the Bizz Web site, we saw the use of a component to display the banner **Bizz Online Magazine** (Figure 4, page 5).

If you want to change a component, you only need to change the component once. Any template or component containing that component is changed.

The HTML code for **Banner** is shown in the component editor in Figure 15 below.
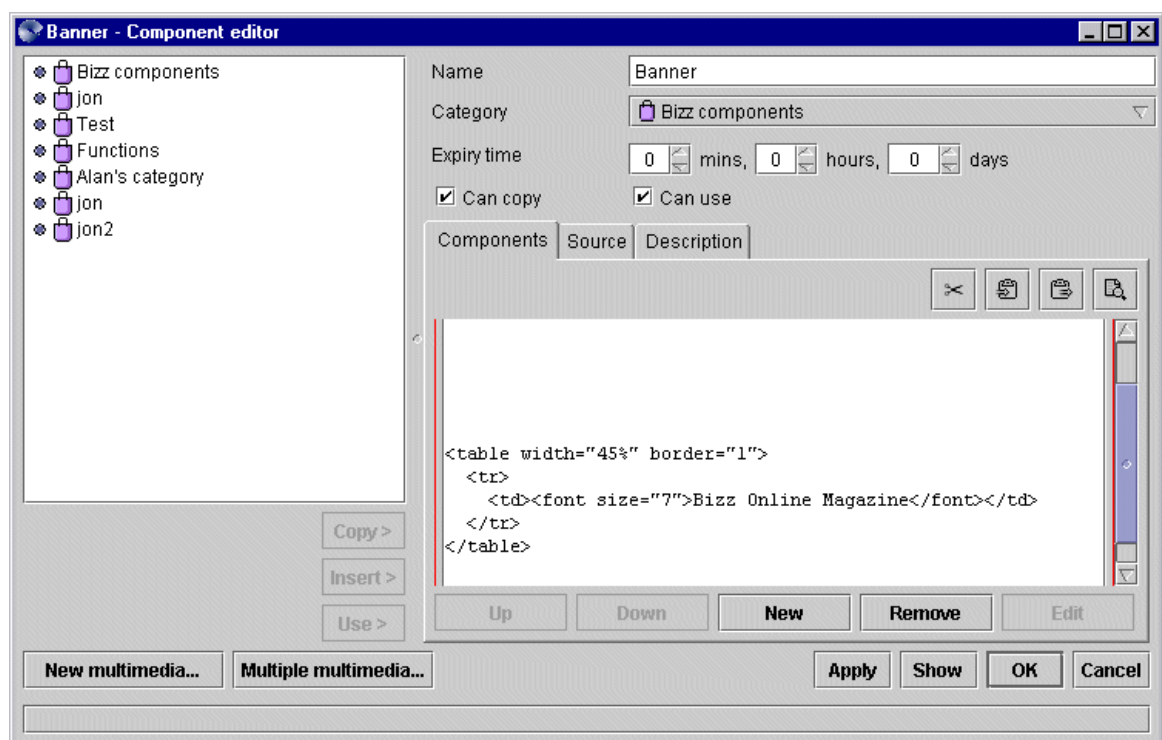
Figure 15. Source code for the Banner component

You can see from Figure 15 that the **Banner** component is a member of the **Bizz Components** category. Categories are merely logical groups of components.

2.9 Showing the relationship between Morello elements

Figure 16 shows the relationship between some of the Morello elements that we discussed in the preceding paragraphs.

2.10 Understanding collections

In Morello, c*ollections* are simply collections of items. Later on, when we talk about groups and users, you will see that you can grant group access and user access to specific item types. Rather than grant access to many item types one at a time, it might be easier to grant access to *collections* of item types.

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2.11   Understanding publishing statuses

During the creation of Web content, you can specify that some people can only edit content, others can sign off for publishing, and so on. The restrictions are applied at each *status* in the publishing flow. Each user can sign off to the next status.
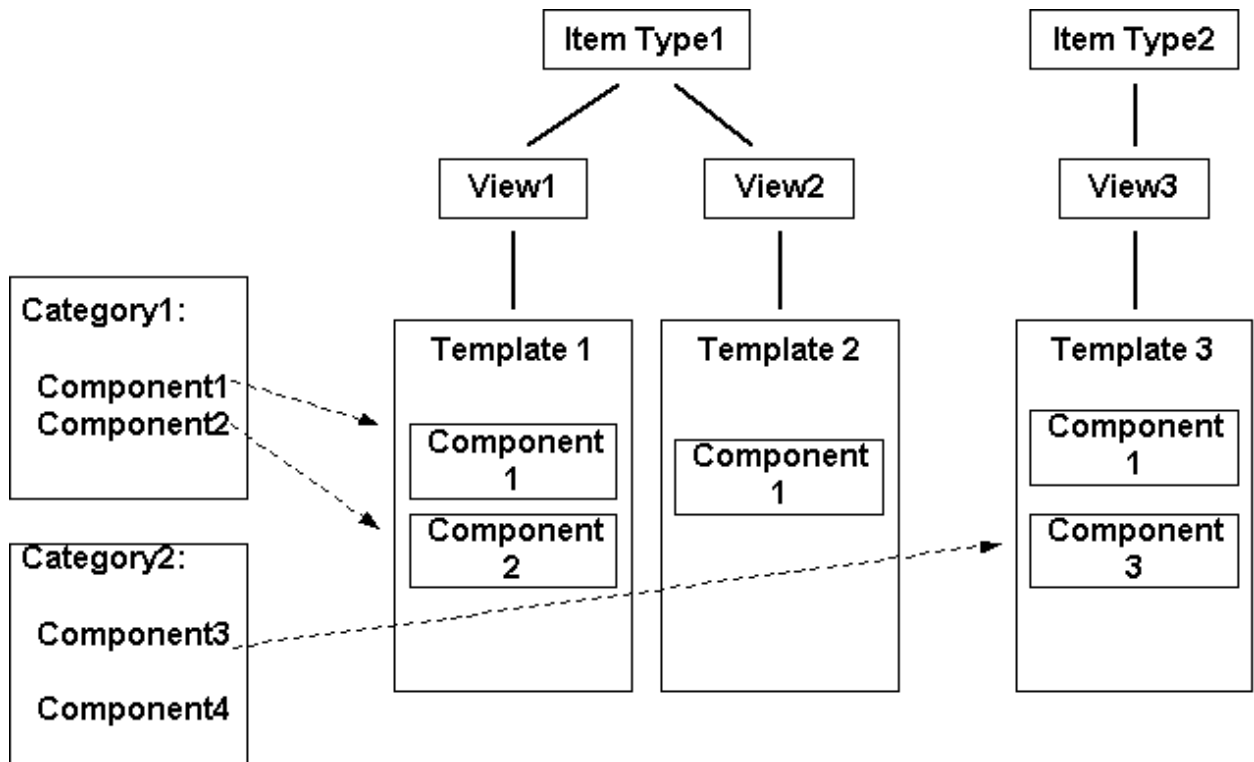
Figure 16. Relationship between Morello elements

2.12   What sequence do you use to create Morello elements?

Figure 17 on page 16 shows the sequence in which you must create some the Morello elements that we have discussed so far. To prevent confusion, we are only showing some of the elements. We will add the other elements to the diagram later. The figure shows that some sequences are forced, and others are immaterial:

- The category-component-template sequence is forced. In order to insert a component in a template, you must create the component first. When you create a component, you must specify which category you want to create your component in. So, you must define categories before you can create components.

- You must create an item type and a view before you can create a template. However, it does not matter whether you create the item type before or after the view.

- You can create item types and views before or after categories and components.

- You can see from Figure 11, page 12, that when you create an item type, you can specify which collection the item type should be in (top right), and which publishing flow the item type should have (**Publishing flow** tab). It follows that collections and publishing statuses must be defined before you create item types.

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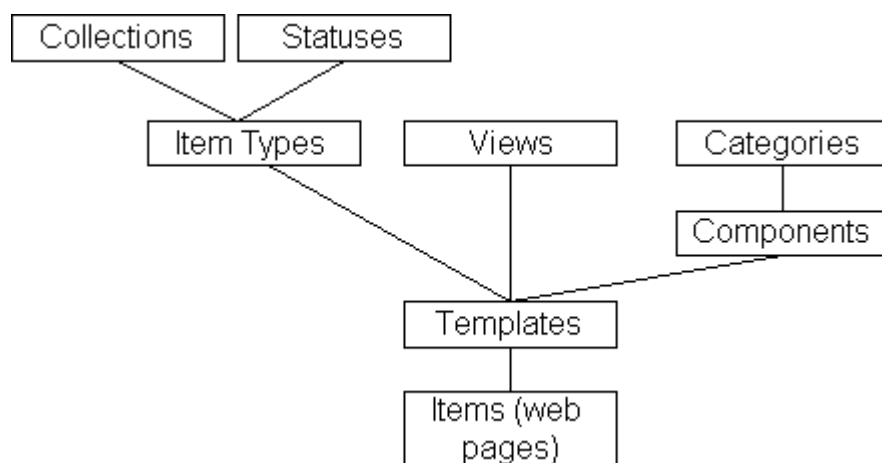
Figure 17. Partial sequence for creating Morello elements

2.13   Understanding users

Morello allows you to set up groups of users who share similar access rights. When you assign a user to a group, the user inherits all the access rights of the group.

Figure 18 shows the user groups for the Bizz Web site. If you select **Movie Authors** and click **Edit**, you can see the properties of the **Movie Authors** group, as shown in Figure 19.
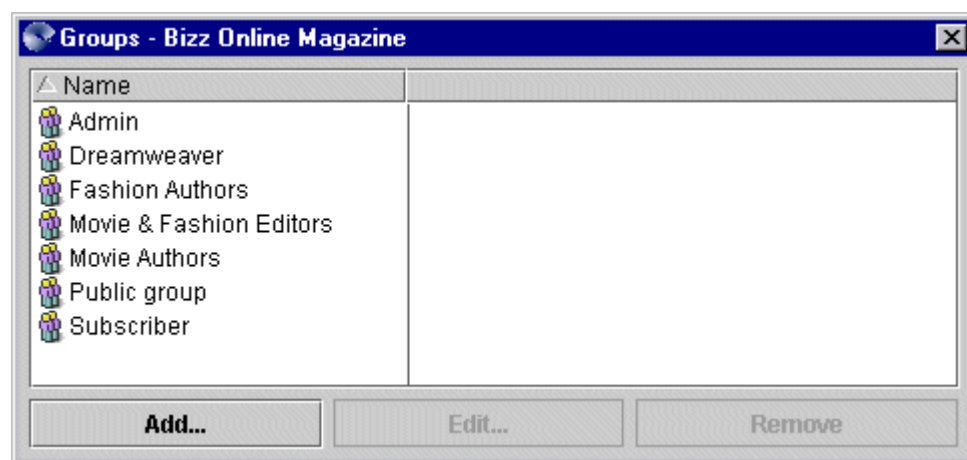
Figure 18. User groups for the Bizz Web site

In the left panel of Figure 19, you can see that the user group **Movie Authors** contains two users, **Mike** and **Joan**. These users can access the item types **Movie Actors** and **Movie Article**.

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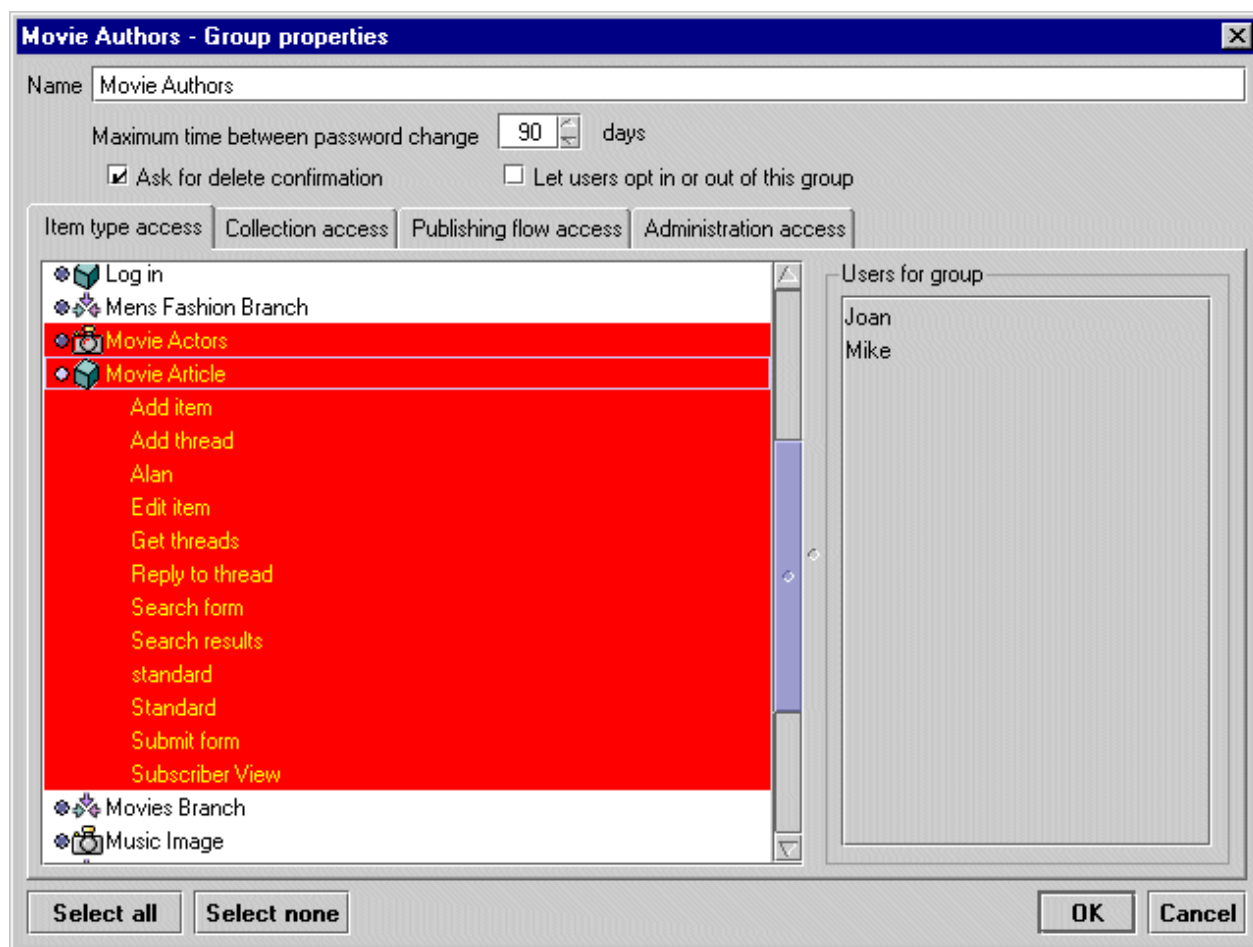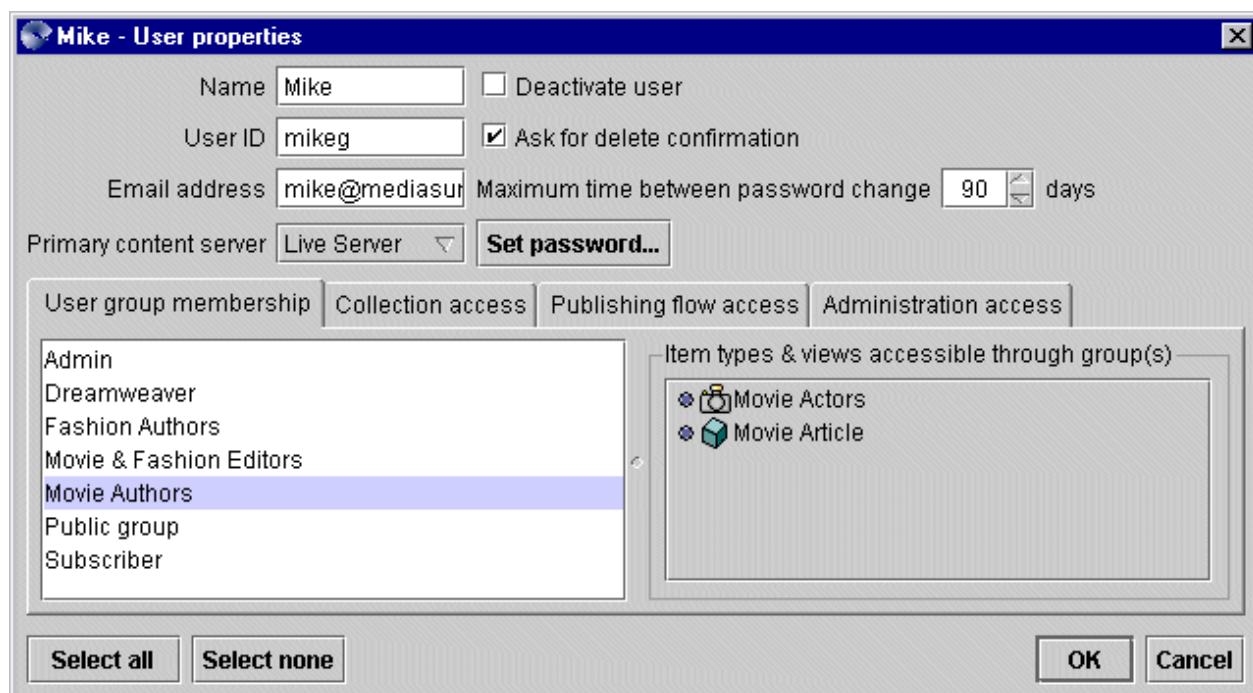
Figure 19. Members of the Movie authors group

Figure 20 shows the properties for the user, Mike. Since Mike is a member of the group **Movie Authors**, Mike inherits all the access rights for the group. So the right panel shows that Mike can access the item types **Movie Actors** and **Movie Article**.

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Figure 20. Properties for the user, Mike

Figure 21 shows the properties for the user, Joan. Joan is also a member of the group **Movie Authors**, but in addition, Joan is a member of the user group **Fashion Authors**. The right panel shows that Joan can access the same item types as Mike, plus the additional item types that all members of the **Fashion Authors** group can access.

Figure 21. Properties for the user, Joan

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2.14   Updating the sequence for creating Morello elements

We can now insert groups and users in our diagram (Figure 22).
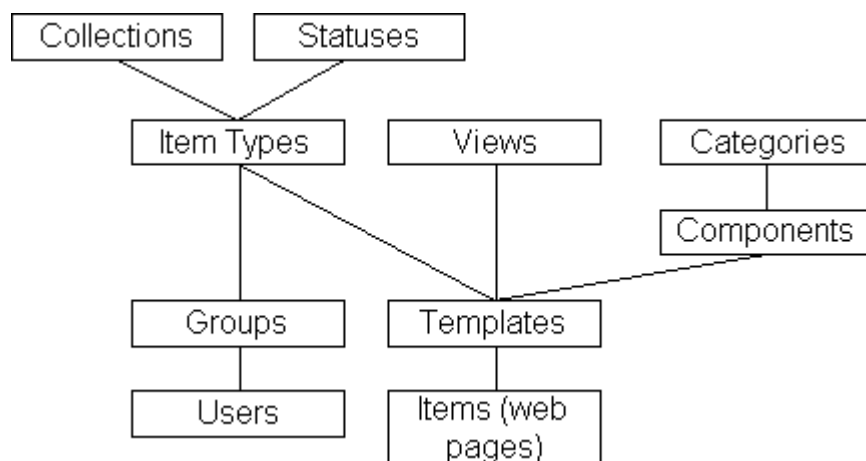
Figure 22. Complete sequence for creating Morello elements

You can see from the tabs in Figure 19, page 17, that when you define a new group, you can specify group access to item types, collections, and publishing flows (statuses). It follows that these elements must be created before you can create groups.

2.15   Understanding locales

Morello allows you to associate items and templates with a locale. A locale is a geopolitical place or area with a common set of properties. In Morello this currently includes a country name and language and two letter and three letter abbreviations for these plus the character set. A locale will typically be named after the country name and the language, for example 'UK English' or 'Netherlands Dutch'. Locales can be created by users as required. They can then be used as a way of classifying items, limiting results in searches to items of particular locales, etc.

Figure 23. Properties for the locale 'UK English'

3   Setting up Morello

3.1   Setting system defaults

You can specify how long a user's password lasts before it must be changed. You can specify the amount of time for a user to edit (lock) a Morello element, such as a template or component. (When a user is editing an object, no other user can edit that object, which is said to be *locked*. Similarly, when the user finishes editing and saves the object, the object is *unlocked*, and can be edited by a different user.) You can specify whether a user is prompted for confirmation before something is deleted.

To set system defaults:

1. In the Morello main window, click **Global.**

2. In the drop-down menu, click **Administration**.

3. In the **Administration** window, click the **Settings** tab.
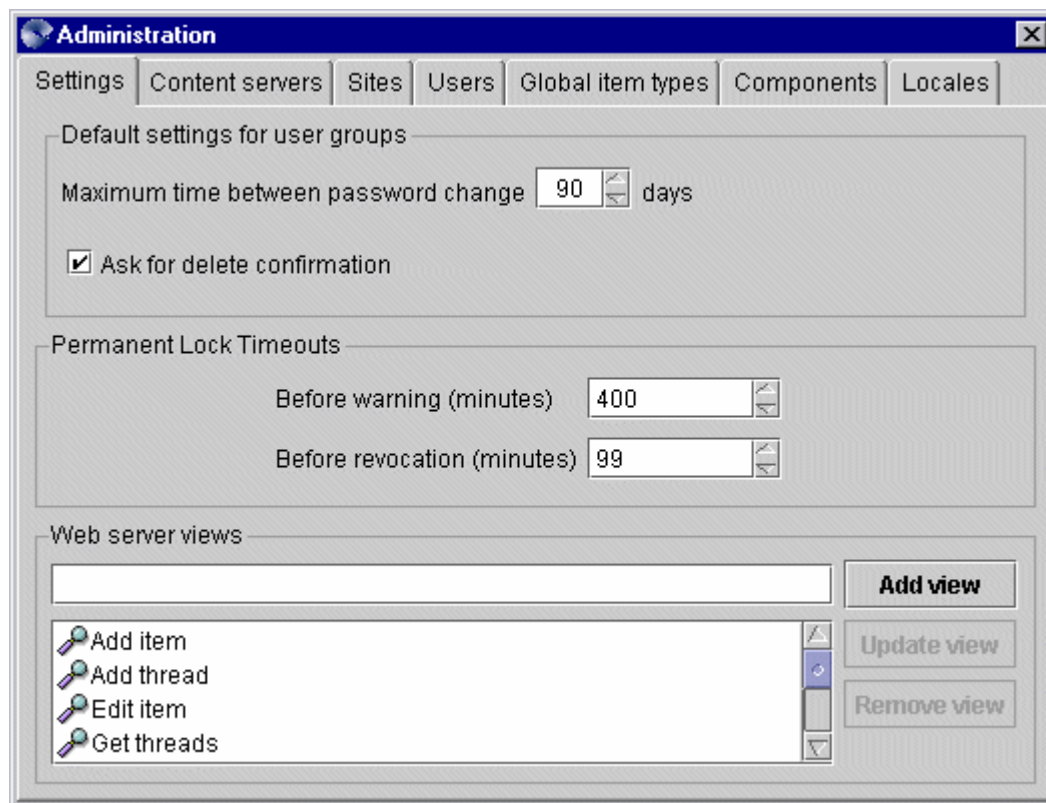
Figure 24. Morello settings

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The lower pane in this tab contains information about global views. Refer to "Working with global views", page 88, for the description.

Maximum time between password change	Enter the number of days that a password can last, or click the arrow keys to select a value. If set to **0**, the password never expires.
Ask for delete confirmation	If this is selected, users will be prompted for confirmation when they try to delete any Morello object.
Before warning (minutes)	Enter the amount of time a user can take to edit a Morello element. If the user exceeds the specified time, an automatic e-mail is sent to that user, requesting the user to finish editing.
Before revocation (minutes)	Enter the amount of time a user can take to finish editing after receiving the e-mail. If the user does not finish editing, the object is automatically unlocked. Any changes made by the user that are not yet committed to the database are discarded.

Description of the Settings tab

3.2   Setting up content servers

The entire content of a Web page as seen in the user's browser is supplied by the content server. Any Web content submitted by the user through the browser is also handled by the content server.

The Content servers tab allows you to add and edit content servers.

To display content servers:

1.   In the Morello main window, click **Global.**

2.   In the drop-down menu, click **Administration**.

3.   In the **Administration** window, click the **Content servers** tab.
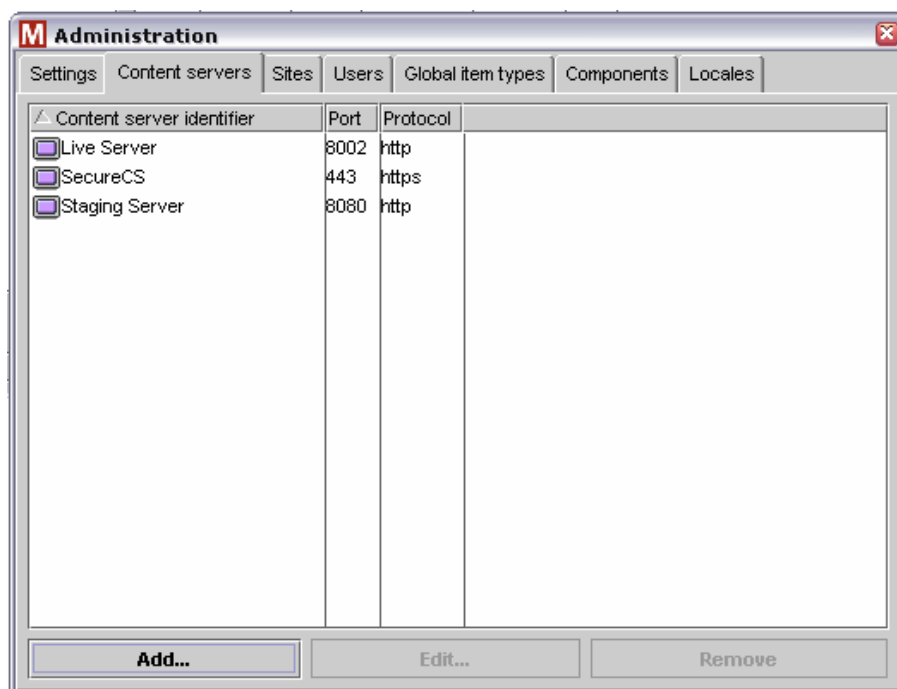
Figure 25. Content servers

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Content server identifier	Unique name for the content server.
Port	Port number on which the content server communicates.
Protocol	The delivery protocol (http or https) used to address all content delivered from this content server.
Add	To add a new server, click **Add**. The **Content server properties** window appears (Figure 26, page 22).
Edit	To edit the information for an existing content server, select the server in the list and click and click **Edit**. The **Content server properties** window appears (Figure 26, page 22).
Remove	To remove a content server, select the server in the list and click **Remove**.

Description of Content server tab

3.3   Working with content servers

You can add a new content server, or edit information for an existing server.

To add a content server:

1. In the previous window (Figure 25), click **Add**.
2. In the **Content server properties** window, enter the information for the server.
3. Click **OK**.

To edit the information for a content server:

1. In the previous window (Figure 25), select a server from the list and click **Edit**.
2. In the **Content server properties** window, edit the information for the server.
3. Click **OK**.
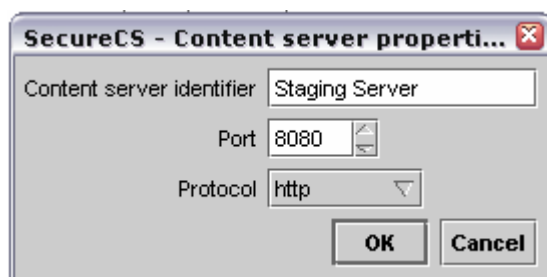
Figure 26. Adding or editing a content server

Content server identifier	Unique name for the content server.
Port number	Port number on which the content server communicates.
Protocol	The delivery protocol (http or https) used to address all content delivered from this content server.

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3.4   Displaying the contents of the bin

The bin stores all items that you remove from the site by using the **Remove** button in the Morello main window (refer to "Displaying items" on page 97). You can restore items to the site, or you can delete them from the bin. Items deleted from the bin are permanently deleted.

To display the contents of the bin:

1.   In the Morello main window, click **Mediasurface.**

2.   In the drop-down menu, click **Bin**.
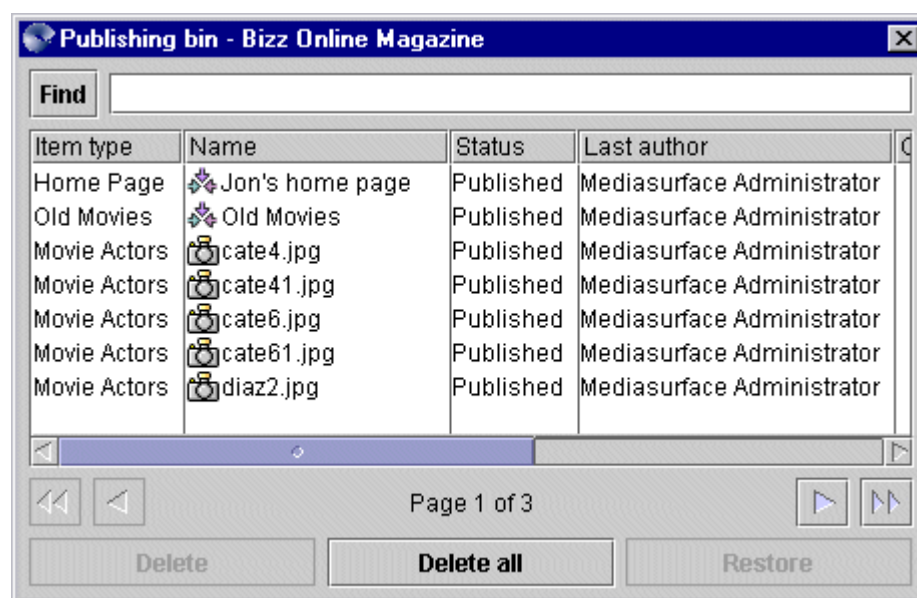
Figure 27. Contents of the bin

The lower pane in this window contains information about global views. Refer to "Working with global views" page 81 for the description.

Find	Allows you to search for items based on the contents of the **Name** column. Type in any consecutive string of characters, and any item whose name contains this string, and click **Find**. For an example, see Figure 28, page 24.
Item type	The item type of the item.
Name	The name of the item.
Status	The publishing status of the item.
Last author	The author who last edited the item.
Comment	The comment provided by the originator or editor of the item.
URL	The location of the item in the site structure. If the item is restored, it will be restored to the same URL.
Delete	To permanently delete an item, select the item in the list and click **Delete**.
Delete all	To permanently delete all items from the bin, click **Delete all**.
Restore	To restore an item to its previous site location, select the item in the list and click **Restore**.

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Description of the Publishing bin window
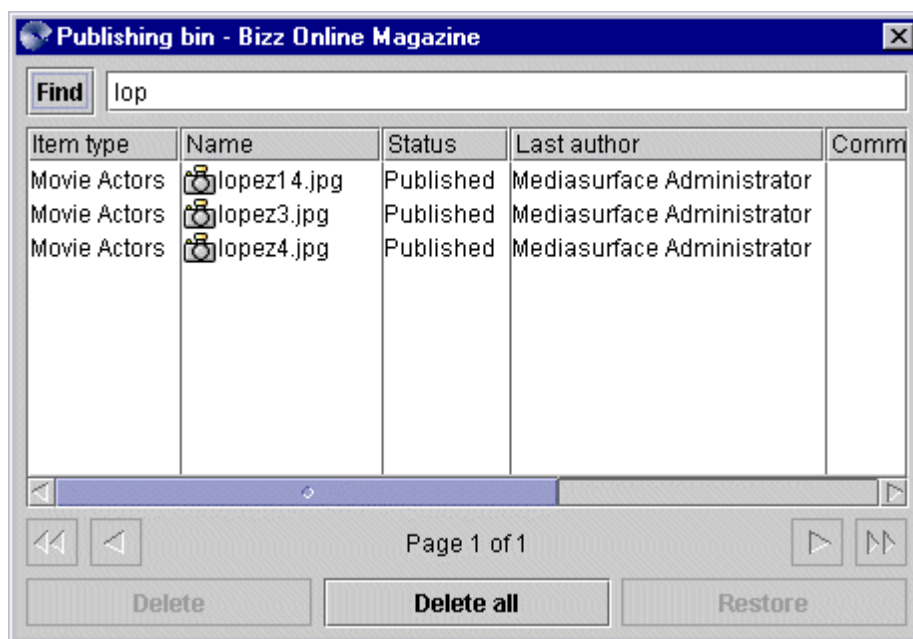
Figure 28. Finding occurrences of "lop" in the bin

3.5   Displaying the preferences window

You can work with Web browsers, change your password, and flush the object cache.

To display the preferences window:

1.   In the Morello main window, click **Global**.

2.   In the drop-down menu, click **Preferences**.

3.   The **Preferences** window appears.
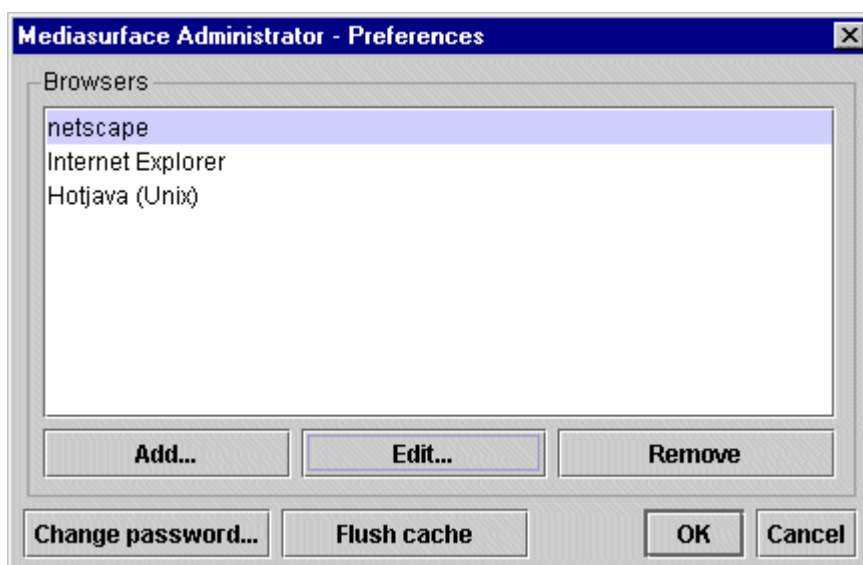
Figure 29. Browsers available for viewing Morello components

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The window contains a list of available browsers. These are the browsers you can use to view a Morello element in a web page, using a template.

Add	Allows you to add a new browser to the list. Refer to "Adding or editing a browser", page 25.
Edit	Allows you to edit the information for an existing browser. Refer to "Adding or editing a browser", page 25.
Remove	To remove a browser from the list, select the browser and click **Remove**.
Change password	Allows you to change your password. The **Change your password** window appears. Specify your current and new passwords and click **OK**.
Flush cache	Flushes all items in the object cache in the Content Rules Console.

Description of the Preferences window

3.6 Adding or editing a browser

You can add a new browser to the list of browsers, or edit the details for an existing browser.

To add or edit a browser:

1. In the previous window (Figure 29), click **Add**, or select a browser and click **Edit**.

   The **Browser properties** window appears.

2. Type a name for the browser in the **Name** field.

3. In the **Command** field, either type the full path name for the browser executable file, or click **Browse** and browse for the file.

4. Click **OK**.
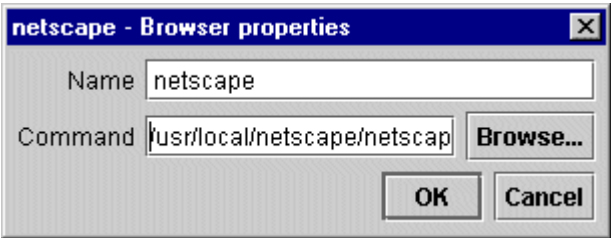
Figure 30. Adding or editing a browser

Name	The name that will appear in the list of browsers (Figure 29).
Command	The full path name of the executable file.
Browse	Allows you to search for the browser executable file.

Description of Browser properties window

3.7 Viewing the registration details

You can display registration information such as licence number, and details of installed Morello modules.

To display the registration details:

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1. In the main Morello window, click **Global**.

2. Click **Registration**.

Figure 31. Registration details

Expiry Date	Date when the licence expires.
Registration Key	Used to generate the full licence key.
Licence Key	Key used to validate the purchase of Morello.
Customer Number	Your company's individual reference number.
Customer License No	Your company's individual licence number.
Maximum No of Clients	The maximum number of clients for which the license is valid.
Modules	Indicates which Morello modules have been bought.
New Licence Key	Field for entering a new licence when upgrading.
Support	URL of Mediasurface Support Team.

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3.8 Displaying sites

You can add, edit and remove sites.

To display sites:

1. In the main Morello window, click **Global**.
2. Click Administration.
3. In the **Administration** window, click the **Sites** tab.

Figure 32. Displaying sites

Name	Name of the site.
Default host	Default address name of the site. This is the same as **Public hostname** in Figure 33, page 28.
Contact	Contact details for site support.
Add	Allows you to add a new site. You can have up to nine sites. Refer to "Adding or editing a site", next section.
Edit	Allows you to edit the details for an existing site. Refer to "Adding or editing a site", next section.
Remove	To remove a site, select a site from the list and click **Remove**.

Description of Sites tab

3.9 Adding or editing a site

You can add new sites, and edit details for existing sites.
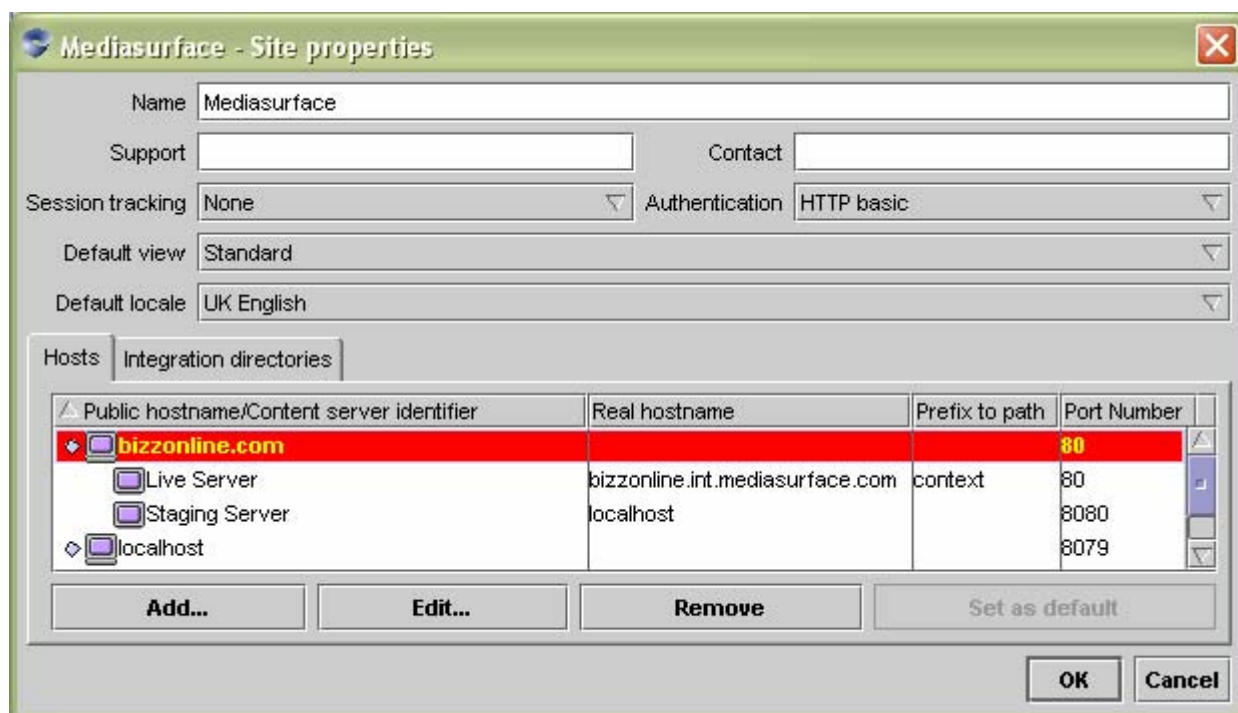
To add or edit a site:

1. In the main Morello window, click **Global**.

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2. Click **Administration**.

3. In the **Administration** window, click the **Sites** tab.

4. To add a site, click **Add**. The **Site properties** window appears (Figure 33).

   or

   To edit the details for an existing site, select a site and click **Edit**. The **Site properties** window appears (Figure 33).

Figure 33. Adding or editing site properties

Name	Name of the site.
Support	Name of site support person.
Contact	Contact information for site support.

Session tracking	Drop-down list containing the options of how to track the sessions of users.
Authentication	Drop-down list containing the options of how to users are to be authenticated. The contents of the drop-down list are:
	HTTP basic
	The content server prompts the client's web browser to display a password box.
	Via URL
	A session key (which includes within it the user's name and encrypted password) must be appended to the URL[1]. The content server uses the session key to re-identify an authenticated user. It is the responsibility of the web developer to build a custom interface with which to initiate URL authentication (typically a login form and a form handler).
	Via cookie
	A session key (which includes within it the user's name and encrypted password) is stored in a cookie on the client's web browser. The content server uses this to re-identify an authenticated user. It is the responsibility of the web developer to build a custom interface with which to initiate cookie-based authentication[2] (typically a login form and a form handler).
Default view	The name of the default view of the site.
Default locale	The locale that new item types created on this site will default to.
Hosts	Tab that allows you to add or edit host information.
Integration directories	Tab that allows you to add or edit integration directories. Refer to "Working with integration directories", page31.
Public hostname	Name of the host server. In the example shown in Figure 33, the public hostname is **bizzonline.com**.
Content server identifier	Name of the content server. In the example shown in Figure 33, the content server names are **Live Server** and **Staging Server**.
Real hostname	The URL for the site.
Prefix to path	The web app context, if any, for the deployed Content server
Port number	Port on which the server communicates.
Add	Allows you to add a public hostname.
Edit	Allows you to edit the details for an existing public hostname.
Remove	To delete a public hostname, select a hostname in the list and click **Remove**.
Set as default	To set a public hostname as default, select a hostname in the list and click **Set as default**.

Description of Site properties window

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[1] Mediasurface API functions and system functions automatically append the session key to URLs. For URLs that are hard-coded in templates or user-created functions, the web developer must ensure that the session key is included.

[2] A custom form handler to initiate cookie-based authentication must append a session key to the URL as in URL authentication. The Content Server automatically handles the cookie with embedded session key.

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3.10   Adding the public hostname for a site

You can add a new public hostname for a site.

To add a public hostname:

1.   In the **Sites** tab in the **Administration** window (Figure 32 page 27), click **Add**.

The **Site properties** window appears (Figure 33 on page 28).

2.   Click **Add**.

3.   The **Host properties** window appears.
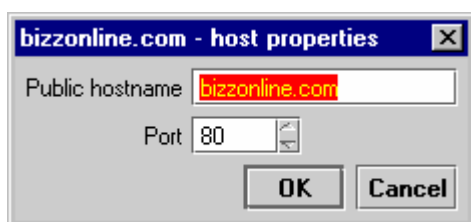
Figure 34. Adding or editing a public hostname

4.   Add the details and click **OK**.

Public hostname	Name of the host server. In the example shown in Figure 33, the public hostname is bizzonline.com.
Port	Port number on which the server communicates.

Description of Host properties window

3.11   Editing the public hostname for a site

You can edit the details for an existing public hostname.

To edit a public hostname:

1.   In the **Site Properties** window (Figure 33 on page 28), select the public hostname and click **Edit**.

The **Host properties** window appears (Figure 34 above).

2.   Edit the details and click **OK**.

Public hostname	Name of the host server. In the example shown in Figure 33, the public hostname is bizzonline.com.
Port	Port number on which the server communicates.

Description of Host properties window

3.12   Adding or editing a real hostname for a content server

To add or edit a real hostname:

1.   Select the content server in the list (Figure 33), and click **Add** or **Edit**.

The **Real hostname properties** window appears (Figure 35 on page 31).

2.   Add a new hostname or edit the existing hostname and its web context (if it has any). Click **OK**.

MEDIASURFACE
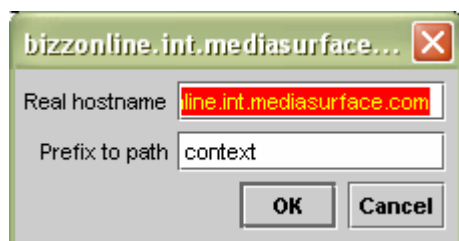
Figure 35. Adding or editing the real hostname and/or web context for a content server

Real hostname	The URL for the content server.
Prefix to path	The prefix context (of web application context, if any) associated with this deployed content server

Description of Real hostname properties window

3.13   Working with integration directories

Integration directories are used for the integration of Web content within the Content Rules Console. You can add the name of a new directory or edit the name of an existing directory (refer to the *Modules guide)*.

To add or edit an integration directory:

1.   In the Site properties window (Figure 33, page 28), click the **Integration directories** tab.

2.   Specify details and click **OK**.
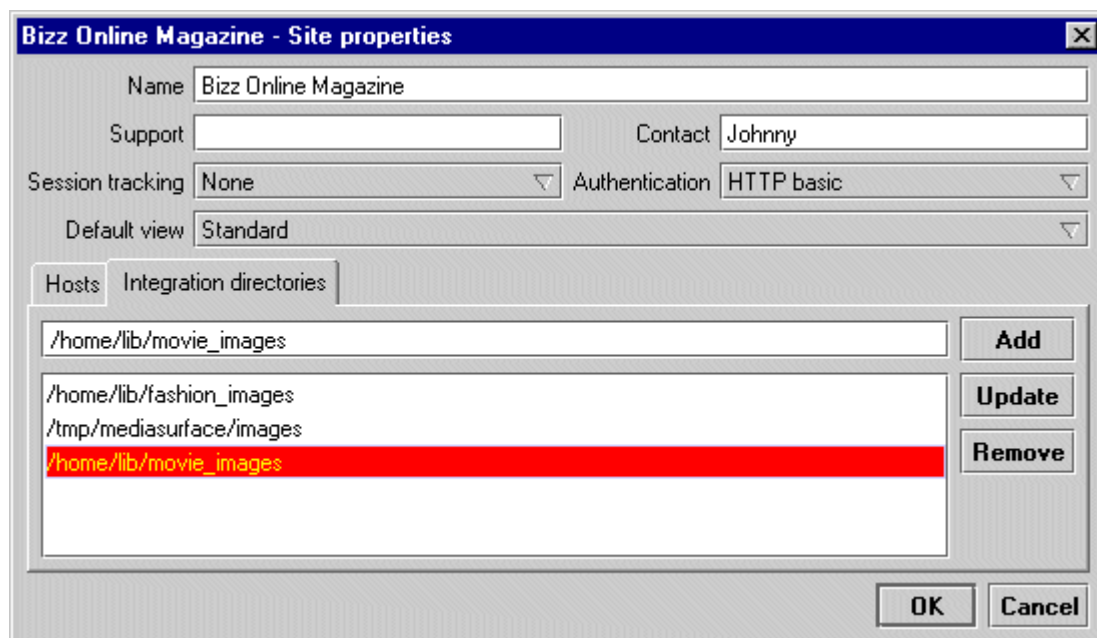
Figure 36. Integration directories

The lower list box contains the integration directories.

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Add	To add a directory path, type the name in the field to the left of **Add**, and click **Add**. Only the absolute path, of a directory structure that already exists will enable the integration.
Update	To edit the name of an existing directory, select a name in the list, and click **Update**. The name that you selected appears in the field to the left of **Add**. Edit the name and click **Update** again. The edited name appears in the list.
Remove	To remove an existing directory, select a name in the list, and click **Remove**.

Description of Integration directories tab

4 Setting up collections and statuses

4.1 Working with collections

You have the option of creating collections of items. Later, when you specify access to item types for groups and users, you may find it faster to grant access to collections of item types.

You can think of collections as adding an additional layer of user access. Normally a user can access an item by being a member of a group that has access to the item type, the view, and the publishing status. You can also specify that the user must have access to a specific collection.

When you create an item type (refer to "Setting up item types", page 60) or add an item (refer to "Adding and editing items", page 103), you can select which collections to add them to. The default collection is **Main**. All users have access to **Main** by default.

To work with collections:

1. In the Morello main window, click **Structure**.
2. Click Collections.

Figure 37. Collections

Add	To add a new collection, type the name in the text box to the left of **Add**, and click **Add**.
Update	To edit the name of a collection, select the collection in the list box. The selected name appears in the upper text box. Edit the name. Click **Update**, and the edited name appears in the list box.
Remove	To remove the name of a collection, select the collection in the list box. The selected name appears in the upper text box. Click **Remove**, and the collection is removed from the list box.
	If you delete a collection, all items in that collection are permanently deleted. Permanently deleted items are not stored in the bin, so cannot be later restored. (For information on the bin, see "Displaying the contents of the bin" on page 23.)
	When you delete a collection, any items in that collection no longer appear in the right pane of the main Morello window (see, for example, Figure 83 on page 97).
Set as default	To set a new collection to be the default, type in the new name and click **Set as default**. To set an existing collection to be the default, select the name in the list box and click **Set as default**.

Description of Integration directories tab

4.2 Working with publishing statuses

During the creation of your Web site, you can impose restrictions on who can add and edit content. You can specify that some users can make changes only during the early stages of the publishing flow, whereas others can make changes at any time (refer to "Granting group access to the publishing flow", page 48; and "Granting user access to publishing flow", page 56). Some content could have a simple publishing flow, such as New and Published. Other content could require a more complex flow.

Before you can specify any publishing flows, you must define the publishing *statuses*.

To display the statuses window:

1. In the Morello main window, click **Structure**.

2. Click **Statuses**.

   The **Statuses** window appears.
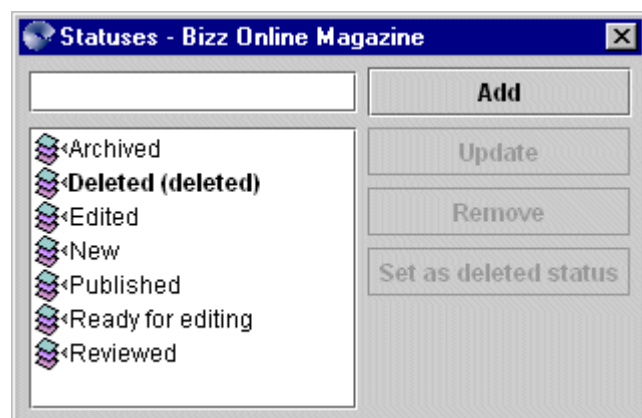
Figure 38. Working with publishing statuses

Add	To add a new status, type the name in the text box to the left of **Add**, and click **Add**.
Update	To edit the name of a status, select the status in the list box. The selected name appears in the upper text box. Click **Update**, and the edited status appears in the list box.
Remove	If you remove a status, all items that are at that status will be removed. To remove the name of a status, select the status in the list box. The selected name appears in the upper text box. Click **Remove**, and the status is removed from the list box.
	Items that are removed as a result of deleting a status are permanently deleted. Permanently deleted items are not stored in the bin, so cannot be later restored. (For information on the bin, see "Displaying the contents of the bin" on page 23.)
	When you delete a status, any item having that status no longer appears in the right pane of the main Morello window (see, for example, .Figure 83 on page 97).
Set as deleted status	You can set a status such that when the publishing flow for an item arrives at that status, the item is deleted. To set a new status to be the deleted status, type in the new name, and click **Set as deleted status**. To set an existing status to be the deleted status, select the name in the list box, and click **Set as deleted status**. The text, **(deleted)**, is appended to the name of the status in the list, as in Figure 38.
	Items that are moved to this status are permanently deleted. Permanently deleted items are not stored in the bin, so cannot be later restored.

Description of the Statuses window

4.3   Working with locales

Locales enable you to classify items of content for particular territories and languages and are used in supporting searching in multiple languages.

Each site will have a default locale. This sets the default locale on a new item type when it is created, although this can be changed by the user. The locale for an item type in turn sets the default locale for a template and an item, which again can be changed by the user.

To work with locales:

1. In the Morello main window, click **Global**.

2. In the drop-down menu, click **Administration**.

    The **Administration** window appears.

3. Click the **Locales** tab.

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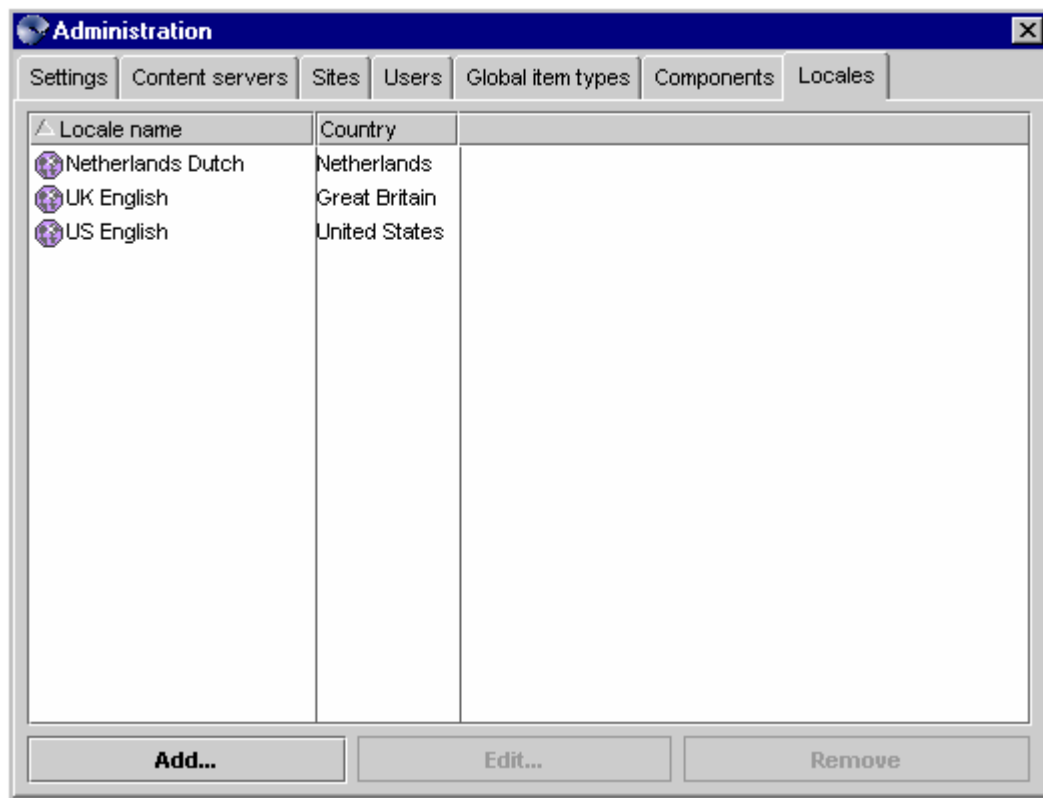
Figure 39. Displaying locales

Locale name	The name of the locale
Country	The territory of the locale
Add	Allows you to add a new locale. Refer to "Adding or editing a locale", next section.
Edit	Allows you to edit the details for an existing user. Refer to "Adding or editing a locale", next section.
Remove	Removes a locale.

Description of the Locales tab
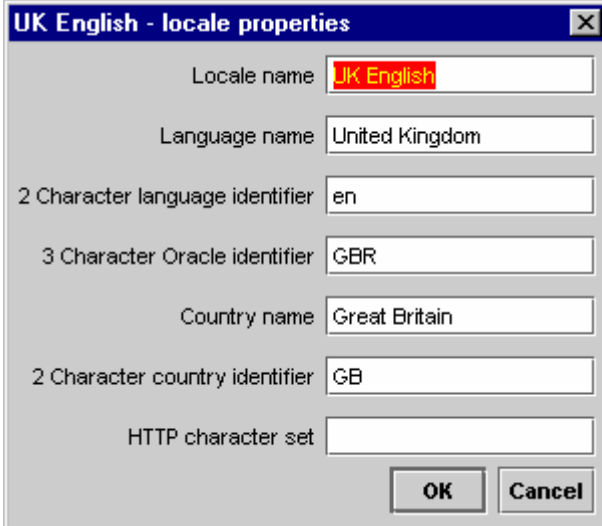
4.3.1   Adding or editing a locale

You can add new locales or edit details for existing locales.

To add or edit a locale:

1.   In the main Morello window, click **Global**.

2.   Click **Administration**.

3.   In the **Administration** window, click the **Locales** tab.

4.   To add a locale, click **Add**. The **Locale Properties** window appears (Figure 40. Locale Properties.).

      or

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To edit the details for an existing locale, select a site and click **Edit**. The **Locale Properties** window appears (Figure 40. Locale Properties.).

Figure 40. Locale Properties.

Name	Description	Use
Locale Name	The name of the locale.	Used purely to provide a name for the locale in the locale editor and can be anything desired.
Country name	The name of the country. This must be one of the Oracle supported territories listed in Supported country names in Appendix A.	Used when setting a specific Oracle locale to use, primarily for stemming or fuzzy matching when searching.
Country 2-Character Identifier	The two-character ISO-3166 country code. These are listed in the Supported country names in Appendix A.	Used in the Content-Language: header returned by the Perl Interaction Engine.
Language name	The name of the language. This must be one of the Oracle supported languages listed in Supported language names in Appendix A.	Used when setting a specific Oracle locale to use, primarily for stemming or fuzzy matching when searching.
Language 2-Character Identifier	The two-character ISO-639-1 language code. These are listed in Supported language names in Appendix A.	Used in the Content-Language: header returned by the Perl Interaction Engine.
Language 3-Character Identifier	The three-char ISO-639-2 language code. These are listed in Supported language names in Appendix A.	Used by Oracle Text to determine the language used for particular items of content.
HTTP Character Set	A valid IANA character set name. For the Java Interaction Engine or with $useutf8 set in the Perl Interaction Engine, this should be set to utf-8. Otherwise it will most likely be one of the ISO-8859 character sets, such as ISO-8859-1.	Used to set the charset attribute of the Content-Type: header returned by the Perl Interaction Engine. This replaces the character set previously set on a template or type.

Description of Locale properties window

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5   Setting up Morello users and groups

You can allow some Morello users to access all Morello sites (global users), and you can ensure that some users can access only specified sites. You can ensure that different users can access different subsets of the Morello functionality.

Rather than specify access rights on a person-by-person basis, you may choose to create *groups* of users. All members of a group inherit the group access rights. However, you can grant an individual member of a group extra rights for statuses and collections only.

5.1   Displaying global users

Global users can access any Morello site. To work with users for a single site, refer to "Working with site users", page 53.

You can add a new global user, or remove or edit the details for an existing global user. If you remove a user, you remove all things created by that user, with one exception discussed in a following paragraph. The following things are deleted: collections, statuses, item types, items, views, categories, components, templates, groups, and users. Deleting a user can cause recursive deletion of users created by that user, and therefore of all things created by these users.

Instead of removing a user, it might be safer to simply *deactivate* the user. This means that the user account can no longer be used, but everything created by the user remains available for use by other users.

If you delete a user who created the root item in the site, that item is not deleted: it is reassigned to msadmin.

You can search for a user by name or by ID. Your search criteria can specify an exact match or a similar match.

To display global users:

1.   In the Morello main window, click **Global**.

2.   In the drop-down menu, click **Administration**.

      The **Administration** window appears.

3.   Click the **Users** tab.

MEDIASURFACE
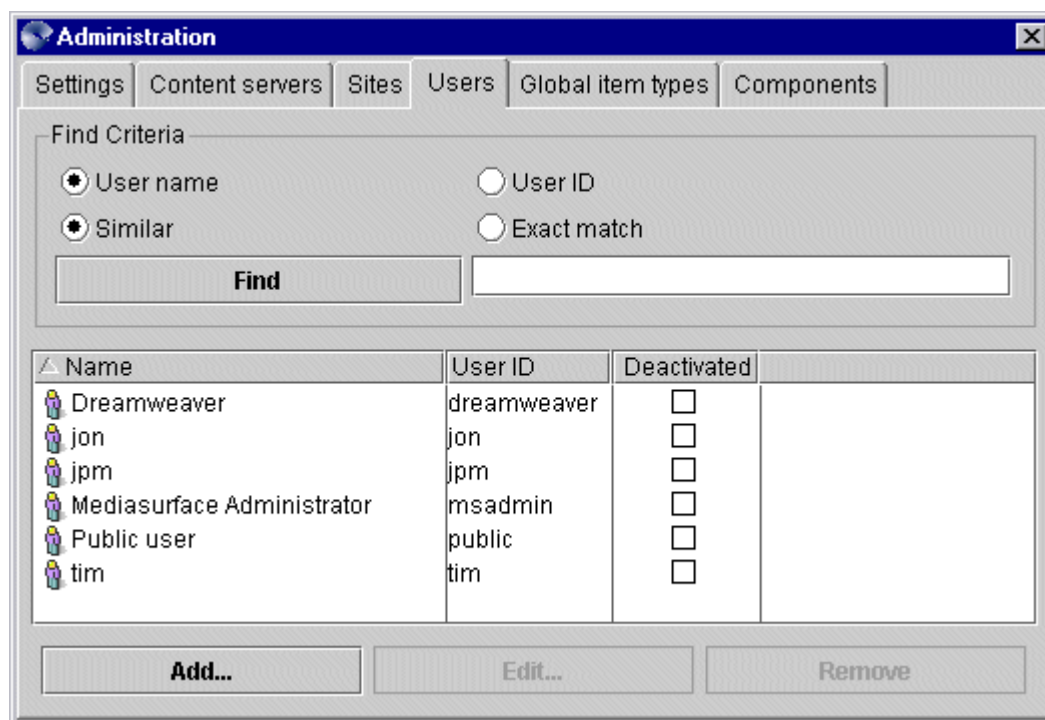
Figure 41. Displaying Global Users

User name	Select this radio button if you intend to search for a user name.
User ID	The name used to log in to Morello. Select this radio button if you intend to search for a user by **User ID**.
Similar	Select this radio button if you want to search for any user whose user name or user ID is similar to the information that you specify in the **Find** text box.
Exact match	Select this radio button if you want to search for a user using the exact information that you specify in the **Find** text box.
Find	You can search for an existing user by typing user information in the **Find** text box and clicking **Find**. The radio buttons allow you to specify whether you want to search for an existing user by name, or by ID.
Name	The user's name.
User ID	The name used by the user to log in to Morello.
Deactivated	Indicates that the user account is closed, but elements created by the user are still available.
Add	Allows you to add a new user. Refer to "Working with global users", next section.
Edit	Allows you to edit the details for an existing user. Refer to "Working with global users", next section.
Remove	Removes a user from the global user list.

Description of the Users tab

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5.2   Working with global users

You can add a new global user, and specify the access rights for the user, and you can edit the details for an existing user.

To add a new global user:

1.   In the **Users** tab (Figure 41, page 40), click **Add**.

       The **User properties** window appears.
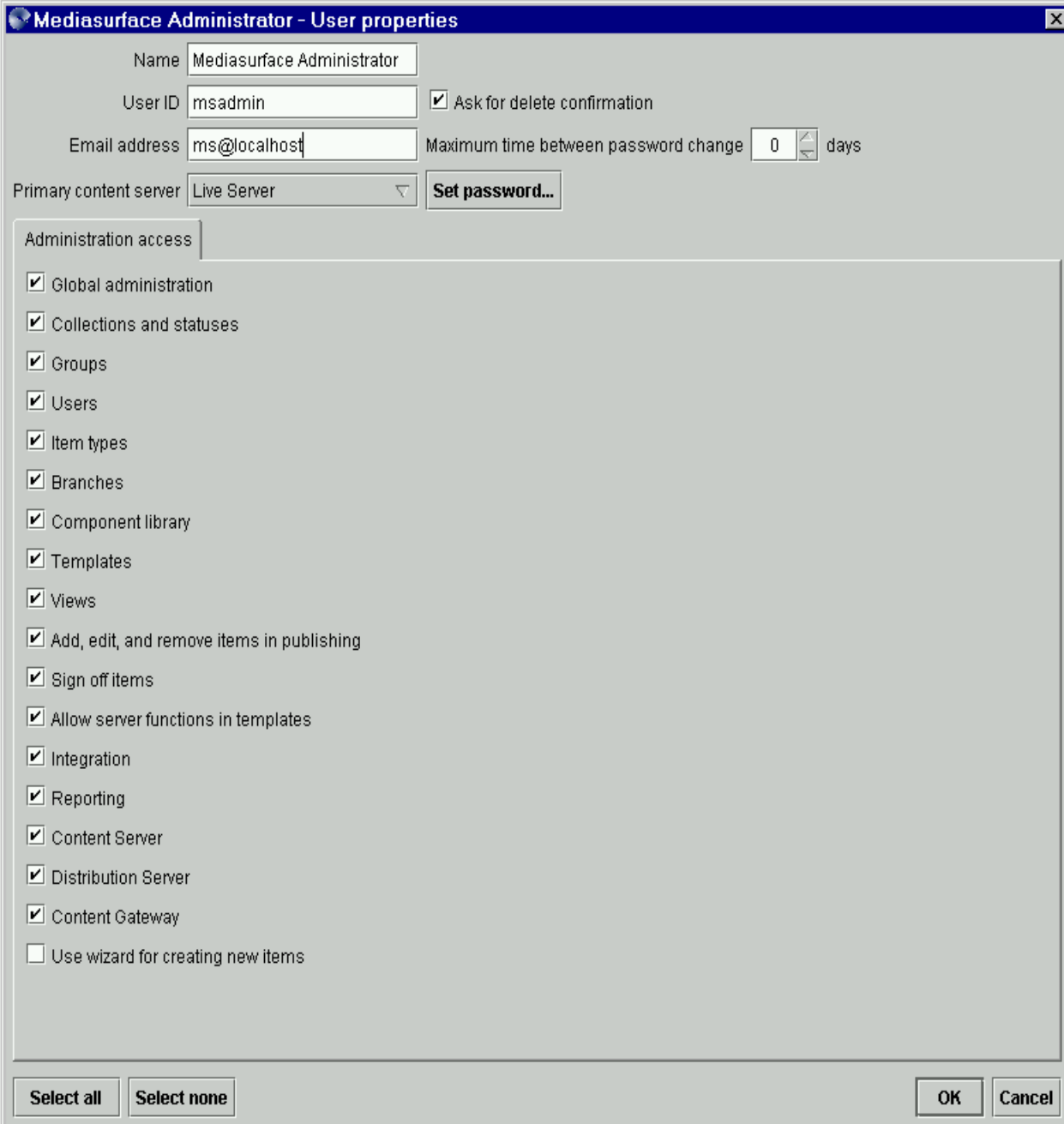
2.   Specify the user details and click **OK**.

To edit the details for an existing global user:

1.   In the **Users** tab (Figure 41, page 40), select a user and click **Edit**.

       The **User properties** window appears.

2.   Edit the user details and click **OK**.

Figure 42. Access rights for a global user

Unless otherwise specified, the Administration access tab grants user rights in the Content Rules Console.

Name	The name of the user.
User ID	The name used to log in to Morello.
E-mail address	The e-mail address of the user.

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Deactivated	Indicates that the user account is closed. Anything created by the user is still available. Note that if you had selected **Mediasurface Administrator** or **Public user** in the previous window (Figure 41, page 40), the **Deactivated** check box would not be displayed.
Ask for delete confirmation	If you check this box, the user is asked to confirm any deletions.
Maximum time between password changes	When the life of your current password reaches the specified value, you are prompted to change your password.
Primary content server	Click the down arrow to show a list of servers. Select the primary content server for the user. The live server delivers published content as seen by a public user. The staging server delivers all other non-published content.
Set password	Allows you to specify a password that allows the new user to access the primary content server.
Global administration	When checked, the current user is allowed to perform global administration.
Collections and statuses	When checked, the current user is allowed to define collections and statuses.
Groups	When checked, the current user is allowed to create and edit groups.
Users	When checked, the current user is allowed to create and edit users.
Item types	When checked, the current user is allowed to add, edit, and delete leaf item types.
Branches	When checked, the current user is allowed to add, edit, and delete Branch item types.
Component library	When checked, the current user is allowed to create and edit components.
Templates	When checked, the current user is allowed to create and edit templates.
Views	When checked, the current user is allowed to create and edit views.
Add, edit, and remove items in publishing	When checked, the current user is allowed to add, edit, and remove items in publishing. This privilege applies in the Content Rules Console and in the browser.
Sign off items	When checked, the current user is allowed to sign off items to the next publishing status. This privilege applies in the Content Rules Console and in the browser.
Allow server functions in templates	When checked, the current user is allowed to insert server functions in templates.
Integration	When checked, the current user is allowed to use the Integration module (refer to *Morello Modules Guide*).
Reporting	When checked, the current user is allowed to use the Reporting module (refer to *Morello Modules Guide*).
Content Server	When checked, the current user is allowed to add and edit Content Server details (refer to *Morello Modules Guide*).
Distribution Server	When checked, the current user is allowed to add and edit Distribution Server details (refer to *Morello Modules Guide*).
Content Gateway	When checked, the current user is allowed to use the Content Gateway, and to add and edit details (refer to *Morello Modules Guide*).
Use wizard for creating new items	When checked, the user is presented with a wizard when creating a new item. The wizard guides the user through the steps needed to create the item.

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Select all	Click this button to check all the access rights. If you intend to check most of the access rights, it might be quicker to use **Select all**, and then deselect the ones you don't want.
Select none	Click this button to remove checks from all access rights.

Description of the User properties window

5.3 Displaying groups

When you add a new Morello user (refer to "Working with site users", page 53), you can specify access rights for that user. However, you can save a lot of time by creating a group, and then specifying access rights for that group. When you add a new user, you then specify that the user is to be a member of the group. The new user then automatically inherits all the rights of the group.

You can add as many groups as you wish, or edit the details for existing groups.

To display groups:

1.	In the Morello main window, click **Access**
2.	In the drop-down menu, click **Groups**.
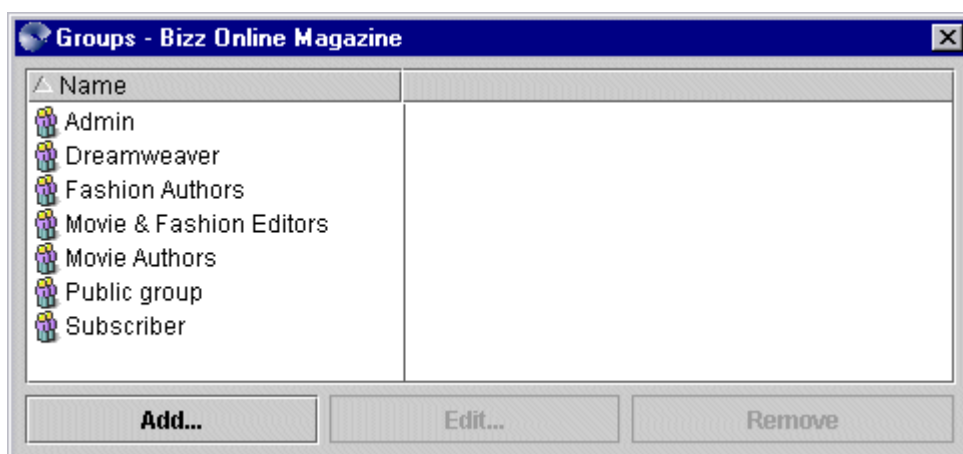
Figure 43. Displaying groups

Name	The name of the group.
Add	To add a new group click **Add**. Refer to "Working with groups", next section.
Edit	To edit the details for an existing group, select the group from the list and click **Edit**. Refer to "Working with groups", next section.
Remove	To remove a group, select the group from the list and click **Remove**.

Description of the Groups window

5.4 Working with groups

Use the **Group properties** window to grant the access rights to groups, and specify some options. You can do the following:

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- Specify password duration.
- Specify whether users are prompted for confirmation of deletions.
- Grant group access to item types, collections, publishing flow, and administration in the Content Rules Console.

To add a new group:

1. In the **Groups** window (previous window), click **Add**.

   The **Group properties** window appears.

2. 1. Specify the group properties and click **OK**.

To edit the properties for an existing group:

1. In the **Groups** window (previous window), select a group and click **Edit**.

   The **Group properties** window appears.

2. Edit the group properties and click **OK**.
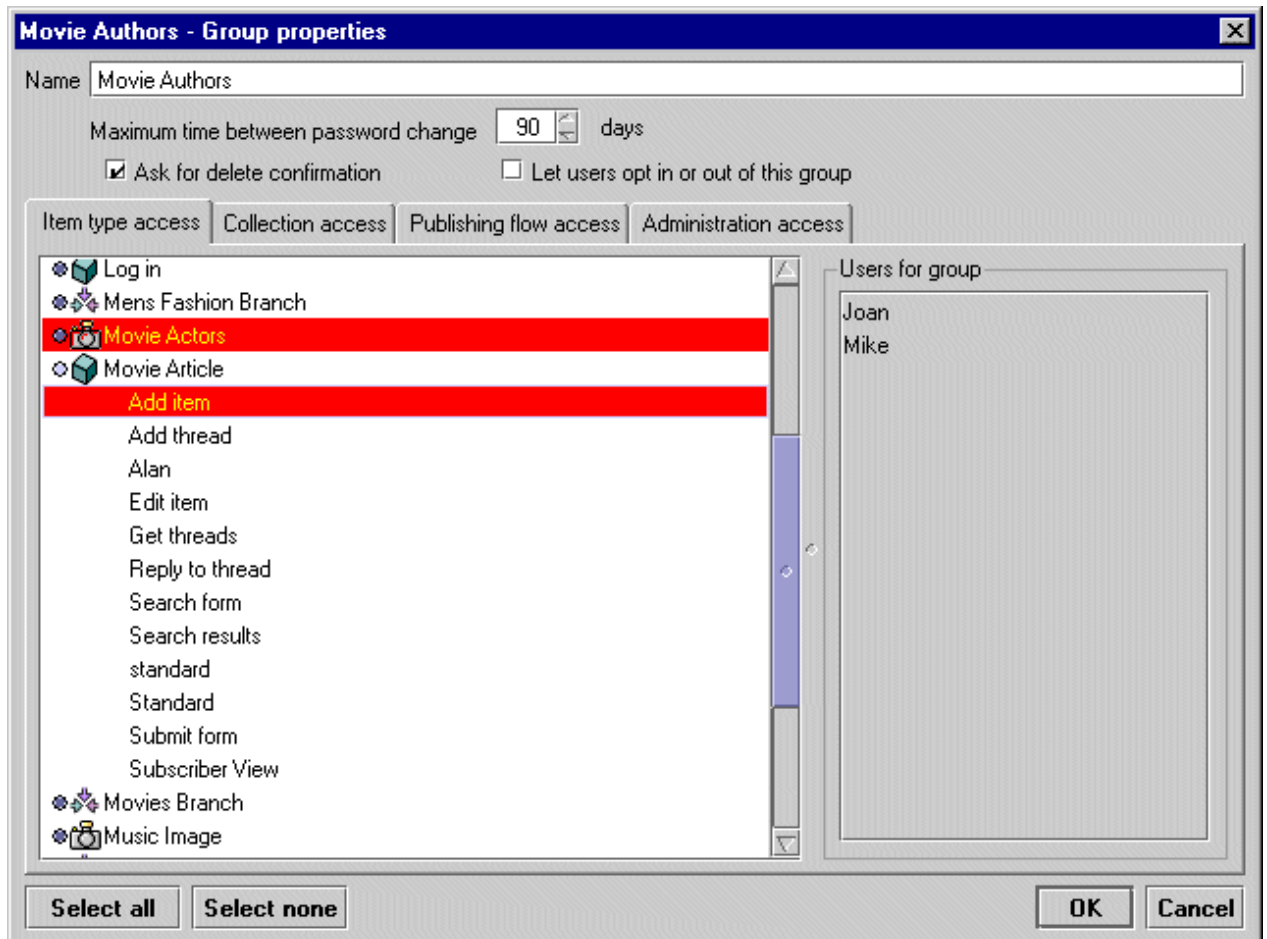
Figure 44. Group properties window

The contents of each tab are described in later sections.

Name	The name of the group.
Maximum time between password change	When the life of your current password reaches the specified value, you are prompted to change your password.
Ask for delete confirmation	If this box is checked, members of the group are prompted to confirm the deletion of any item.
Let users opt in or out of this group	If this box is checked, members can opt out of the group, and opt in again later.
Item type access	Allows you to specify the item types that the group can access (refer to "Granting group access to item types", page 46).
Collection access	Allows you to specify the collections that the group can access (refer to "Granting group access to collections", page 47).
Publishing flow access	Allows you to specify the publishing flows that the group can access (refer to "Granting group access to the publishing flow", page 48).
Administration access	Allows you to specify the administration access rights for the group (refer to "Granting administration access rights to a group", page 49).
Select all	Click this button to check all the access rights. If you intend to check most of the access rights, it might be quicker to use **Select all**, and then deselect the ones you don't want.
Select none	Click this button to remove checks from all access rights.

Description of the Group properties window

5.5   Granting group access to item types

You can specify which item types can be accessed by group members. For a specific item type, you can specify which views are accessible.

To grant group access to item types:

1. Click the **Item type access** tab in the **Group properties** window (Figure 44, page 45).
2. In the left pane, select the item types that members of the current group can access.
3. To allow access only to specific views for an item type, expand the item type and select the views.

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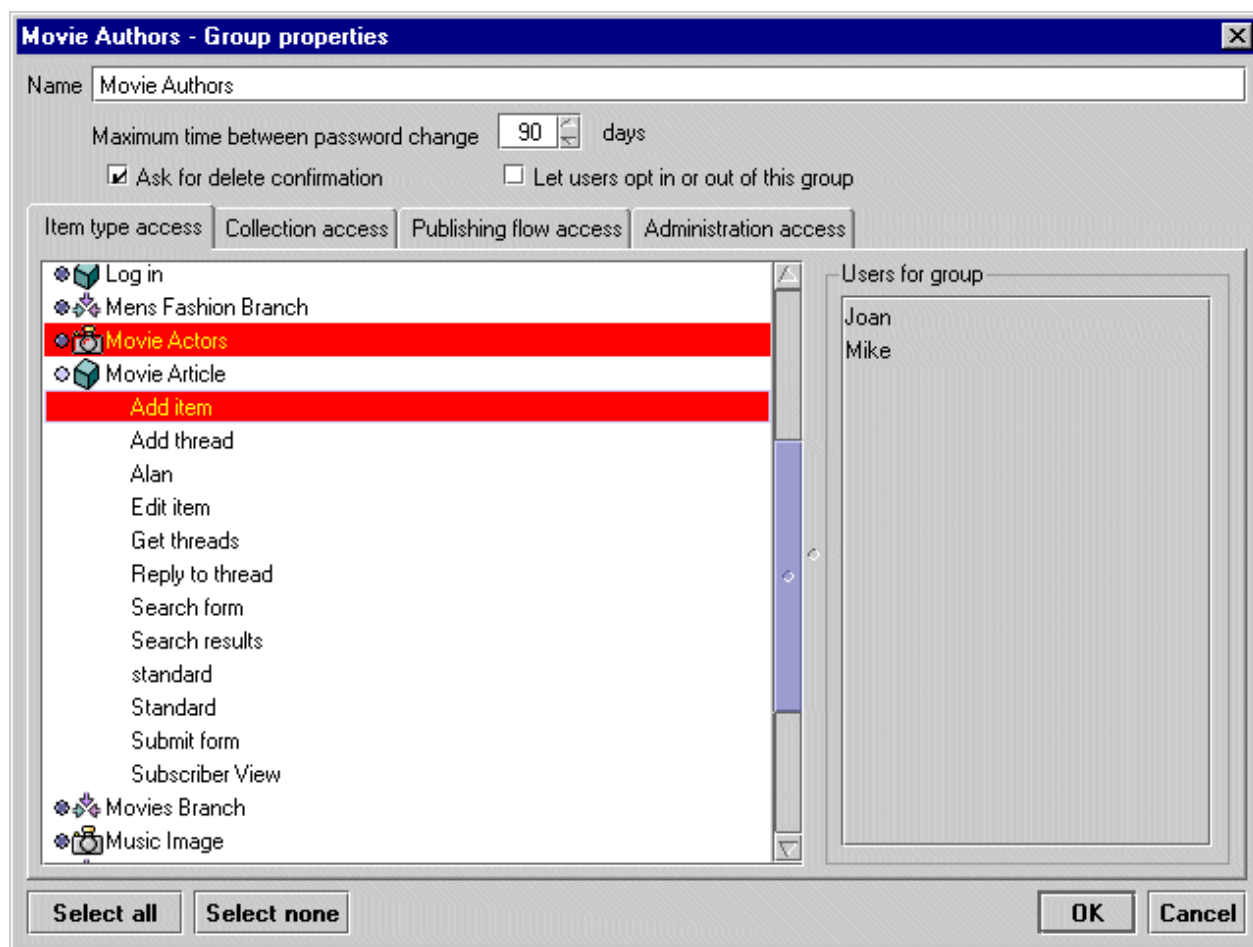
Figure 45. Granting group access to item types

For a description of the fields above the tab, refer to "Working with groups", page 44.

The left pane contains all the item types in the current site. You can expand each item type to show the views associated with that item type.

The right pane shows the users that are in the current group.

5.6   Granting group access to collections

You can specify which collections can be accessed by group members.

To grant group access to collections:

Click the **Collection access** tab in the **Group properties** window (Figure 44, page 45).

MEDIASURFACE
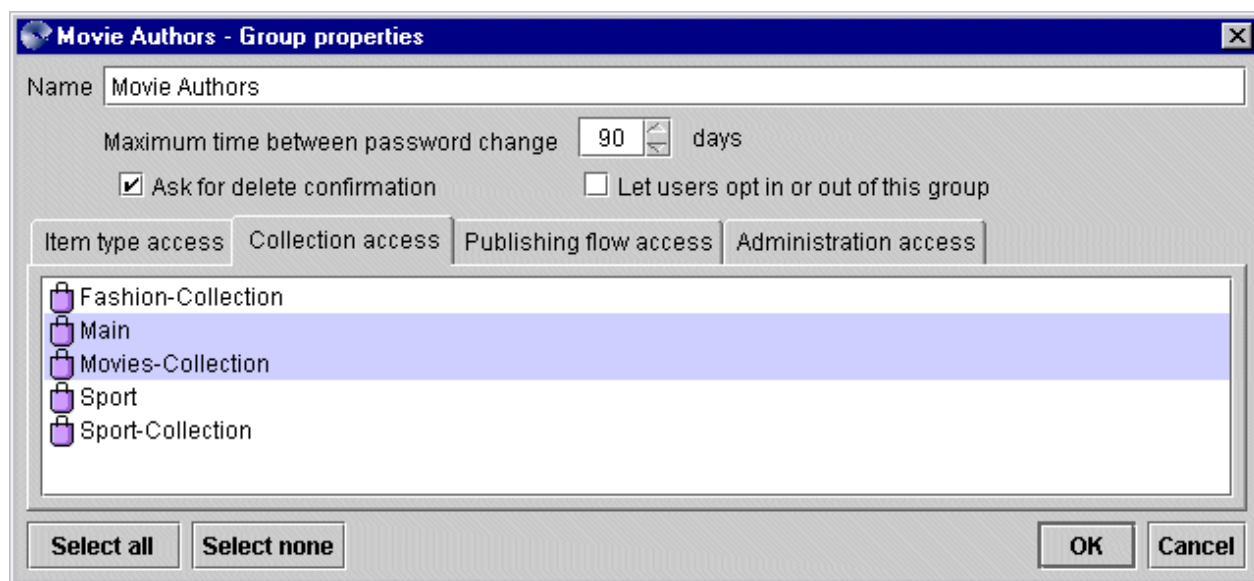
Figure 46. Granting collection access to a group

For a description of the fields above the tab, refer to "Working with groups", page 44.

The pane shows all the collections in the site. The selections highlighted in purple are currently accessible to the group.

You can select additional collections that the group can access, or you can deselect a collection by clicking.

5.7   Granting group access to the publishing flow

You can specify which publishing flows can be accessed by group members.

To grant group access to publishing flow:

Click the **Publishing flow access** tab in the **Group properties** window (Figure 44, page 45).
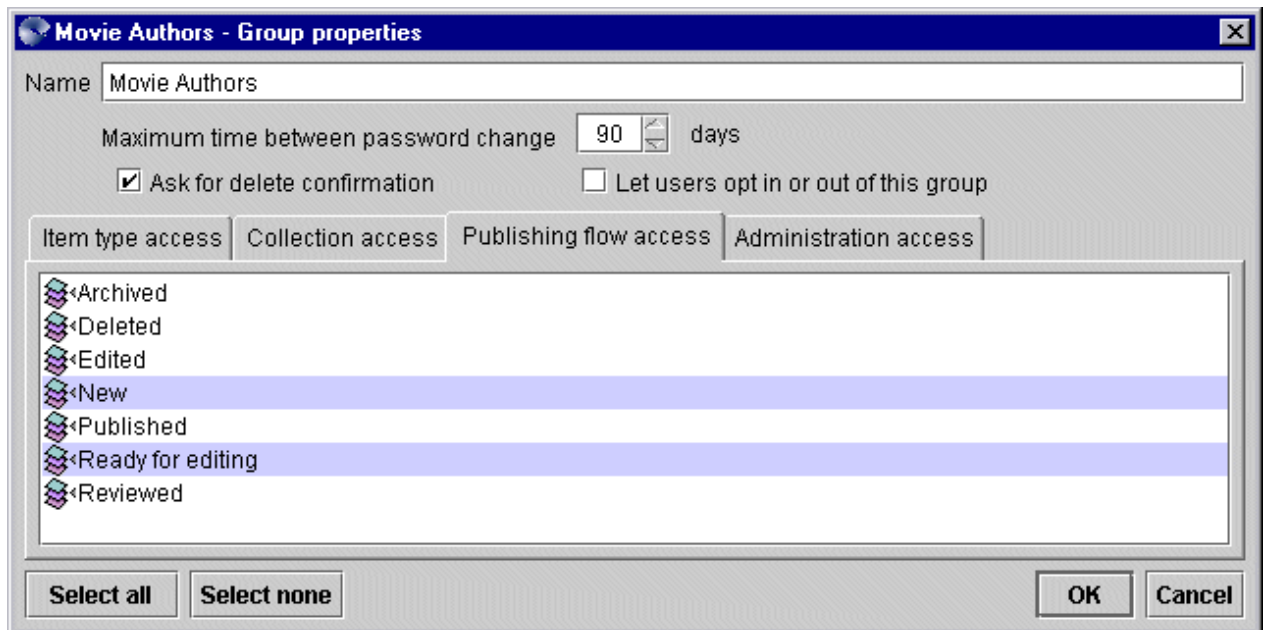
Figure 47. Granting group access to publishing flow

For a description of the fields above the tab, refer to "Working with groups", page 44.

The pane shows all the publishing statuses for the current site. Statuses highlighted in purple are currently accessible to the current group.

5.8   Granting administration access rights to a group

You can specify which access rights are granted to group members. You can specify:

- Which Morello elements can be created, such as groups or item types.
- Whether a group member is allowed to add, edit, or remove items in the Content Rules Console during the publishing process.
- Which modules a group member is allowed to use, such as the Integration and Reporting modules.

To grant administration access to a group:

1. Click the **Administration access** tab in the **Group properties** window (Figure 44, page 45).
2. Check the access rights for the current group.

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Figure 48. Granting administration access to a group

For a description of the fields above the tab, refer to "Working with groups", page 44.

Unless otherwise specified, the Administration access tab grants user access rights in the Content Rules Console.

Collections and statuses	When checked, members of the group are allowed to define collections and statuses.
Groups	When checked, members of the group are allowed to create and edit groups.
Users	When checked, members of the group are allowed to create and edit users.
Item types	When checked, members of the group are allowed to create and edit leaf item types.
Branches	When checked, members of the group are allowed to create and edit branch item types.
Component library	When checked, members of the group are allowed to create and edit components.
Templates	When checked, members of the group are allowed to create and edit templates.
Views	When checked, members of the group are allowed to create and edit views.
Add, edit, and remove items in publishing	When checked, members of the group are allowed to add, edit, and remove items in publishing. This privilege applies in the Content Rules Console and in the browser.
Sign off items	When checked, members of the group are allowed to sign off items to the next publishing status, if the user has access to the current publishing stage. This privilege applies in the Content Rules Console and in the browser.
Allow server functions in templates	When checked, members of the group are allowed to insert server functions in templates.
Integration	When checked, members of the group are allowed to use the Integration module (refer to *Morello Modules Guide*).
Reporting	When checked, members of the group are allowed to use the Reporting module (refer to *Morello Modules Guide*).
Content Server	When checked, members of the group are allowed to add and edit Content Server details (refer to *Morello Modules Guide*).
Distribution Server	When checked, members of the group are allowed to add and edit Distribution Server details (refer to *Morello Modules Guide*).
Content Gateway	When checked, members of the group are allowed to use the Content Gateway, and to add and edit details (refer to *Morello Modules Guide*).
Asset Transfer	When checked, members of the group are allowed to use the Asset Transfer module.
Morello Site Planner	When checked, members of the group are allowed to use the Site Planner in Morello.
Morello Content Explorer	When checked, members of the group are allowed to use the Content Explorer in Morello.
Morello Template Manager	When checked, members of the group are allowed to use the Template Manager in Morello.
Break others' locks	When checked, members of the group are able to unlock things that are currently locked by others.
Select all	Click this button to check all the access rights. If you intend to check most of the access rights, it might be quicker to use **Select all**, and then deselect the ones you don't want.
Select none	Click this button to remove checks from all access rights.

Description of the Administration access tab

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5.9   Displaying site users

For the current site, you can display all users, or all members of a specified group. You can search for a user by name or by ID. Your search criteria can specify an exact match or a similar match.

You can add a new user, or remove or edit the details for an existing global user. If you remove a user, you remove all things created by that user, with one exception discussed in a following paragraph. The following things are deleted: collections, statuses, item types, items, views, categories, components, templates, groups, and users. Deleting a user can cause recursive deletion of users created by that user, and therefore of all things created by these users.

Instead of removing a user, you can simply *deactivate* the user. This means that the user account can no longer be used, but everything created by the user remains available for use by other users.

To display individual users:

1.   Click **Access** in the Morello main window.

2.   In the drop-down menu, click **Users.**
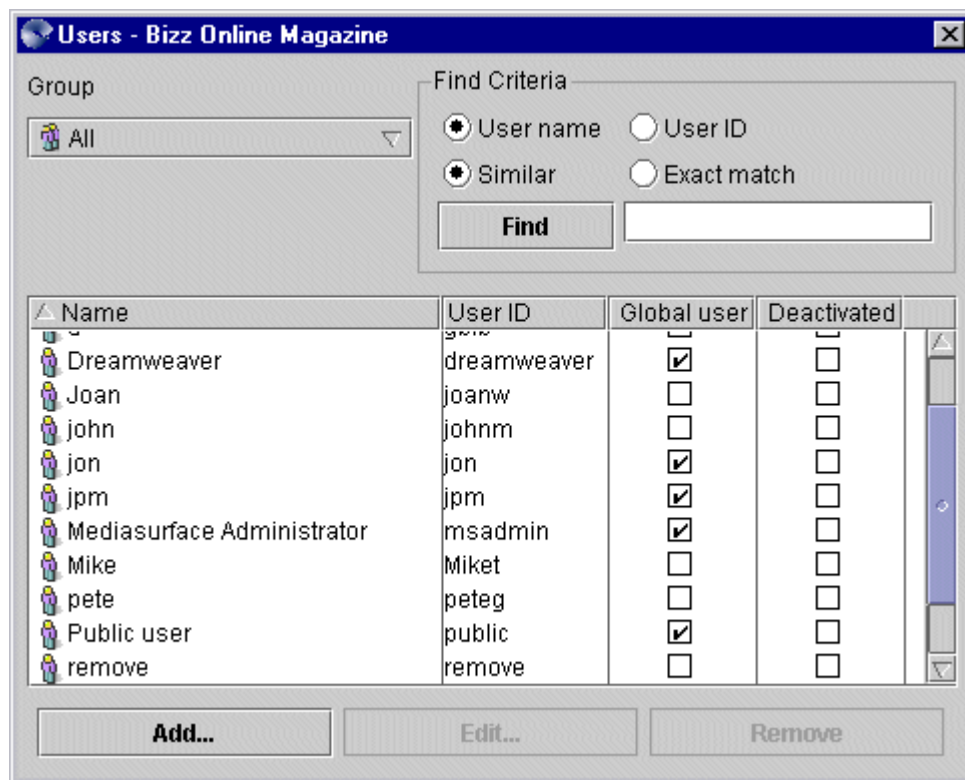
Figure 49. Members of groups (in this case, the All group)

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Group	Click the drop-down list to select the group whose users you want to display. To select all users, irrespective of group, click **All** (as in Figure 49).
User name	Select this radio button if you intend to search for a user name.
User ID	Select this radio button if you intend to search for a user by **User ID**. **User ID** is the name used to log in to Morello.
Similar	Select this radio button if you want to search for any user whose user name or user ID is similar to the information that you specify in the **Find** text box.
Exact match	Select this radio button if you want to search for a user using the exact information that you specify in the **Find** text box.
Find	You can search for an existing user by typing user information in the **Find** text box and clicking **Find**. The radio buttons allow you to specify whether you want to search for an existing user by name, or by ID.
Name	The user's name.
User ID	Name used to log in to Morello.
Deactivated	Indicates that the user account is closed. Anything created by the user is still available.
Add	Allows you to add a new user. Refer to "Working with site users", page 53.
Edit	Allows you to edit the details for an existing user. Refer to "Working with site users", page 53.
Remove	Removes a user from the list of site users.

Description of the Users window

5.10 Working with site users

You can specify details for individual users. You can specify which groups the user will be a member of. You can view the access rights inherited from membership of groups, and grant additional access rights over and above those inherited from the groups.

To work with individual users:

1. Click **Access** in the Morello main window
2. In the drop-down menu, click **Users.**

   The **Users** window appears.

3. In the **Group** drop-down list, click a group, or **All**.
4. To add a user, click **Add**. The **User properties** window appears.

   or

   To edit the details for an existing user, select the user from the list and click **Edit**. The **User properties** window appears.

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Figure 50. Site user properties

The contents of each tab are described in later sections.

Name	The name of the user.
User ID	The name used to log in to Morello.
E-mail address	The e-mail address of the user.
Primary content server	Click the down arrow to show a list of servers. Select the primary content server for the user. The live server delivers published content as seen by a public user. The staging server delivers all other non-published content.
Deactivate user	Check this box to deactivate (as distinct from *remove*) the user. The user's account will be closed, but anything created by that user remains available.
Ask for delete confirmation	When checked, the user is asked for confirmation any time that she wants to delete something.
Maximum time between password changes	When the life of your current password reaches the specified value, you are prompted to change your password.
Set password	Allows you to specify a password that allows the new user to access the primary content server.
User group membership	Allows you to specify the groups that the current user will be a member of (refer to "Assigning a user to groups", next section).
Collection access	Allows you to specify the collections that the current user can access (refer to "Granting user access to collections", page 55).

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| Publishing flow access | Allows you to specify the publishing statuses that the current user can access (refer to "Granting user access to publishing flow", page 56). |
| Administration access | Allows you to specify the administration access rights for the current user (refer to "Granting administration access rights to a user", page 57). |

Description of the User properties window

5.11   Assigning a user to groups

You can specify which groups a user is to be a member of.

To assign a user to groups:

1.   Click the **User group membership** tab in the **User properties** window (Figure 50, page 54).

2.   Select the groups that the current user is to be a member of.

Description of the User group membership tab:

For a description of the fields above the tab, refer to "Working with site users", page 53.

The left pane shows all the groups in the current site. Groups highlighted in purple are the groups that the user is currently a member of. You can add the user to further groups by selecting more groups. You can remove the user from a group by deselecting the group.

The right pane shows the item types that the user is allowed to access, and views of those types, due to membership of the groups selected in the left pane.

When you select an additional group in the left pane, the number of item types that are added to the right pane depends on whether or not the additional group has access to item types that are already displayed.

For example, Figure 51 shows the item types that can be accessed by members of Group1 and Group2. If Group1 is the only group selected in the left pane of Figure 50, page 54, then the right pane displays Item type1 and Item type2. If you now select Group2, only Item type3 is added to the list, because Item type1 already appears.

Figure 51. Item types that members of groups can access

Similarly, if you now deselect Group1 in the left pane, only Item type2 is removed from the right pane.

5.12   Granting user access to collections

You can specify which collections a user can access.

To grant user access to collections:

1.   Click the **Collection access** tab in the **User properties** window (Figure 50, page 54).

2.   Select the collections that the current user can access.

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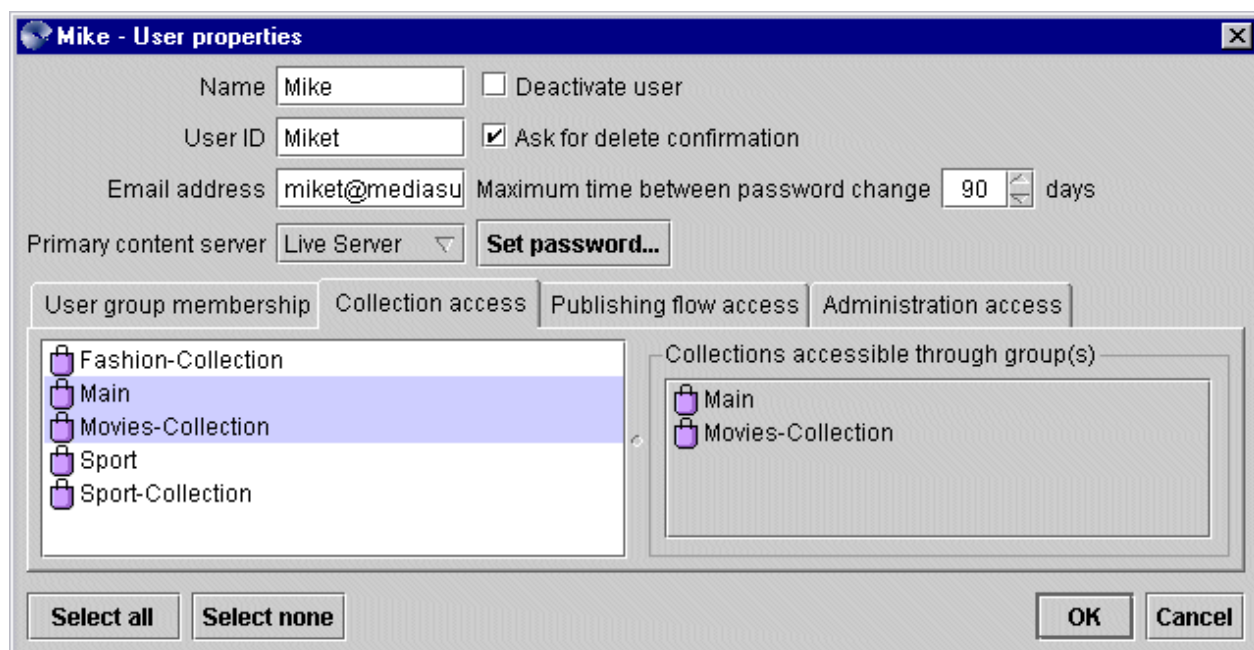
Figure 52. User access to collections

For a description of the fields above the tab, refer to "Working with site users", page 53.

The left pane contains all the collections in the site. Collections that the current user can access are highlighted. The right pane contains the collections that the user can access due to membership of groups.

5.13   Granting user access to publishing flow

You can specify which publishing flows a user can access in the Content Rules Console and in the browser.

To grant user access to publishing flows:

1.   Click the **Publishing flow access** tab in the **User properties** window (Figure 50, page 54).

2.   Select the publishing flows that the current user can access.
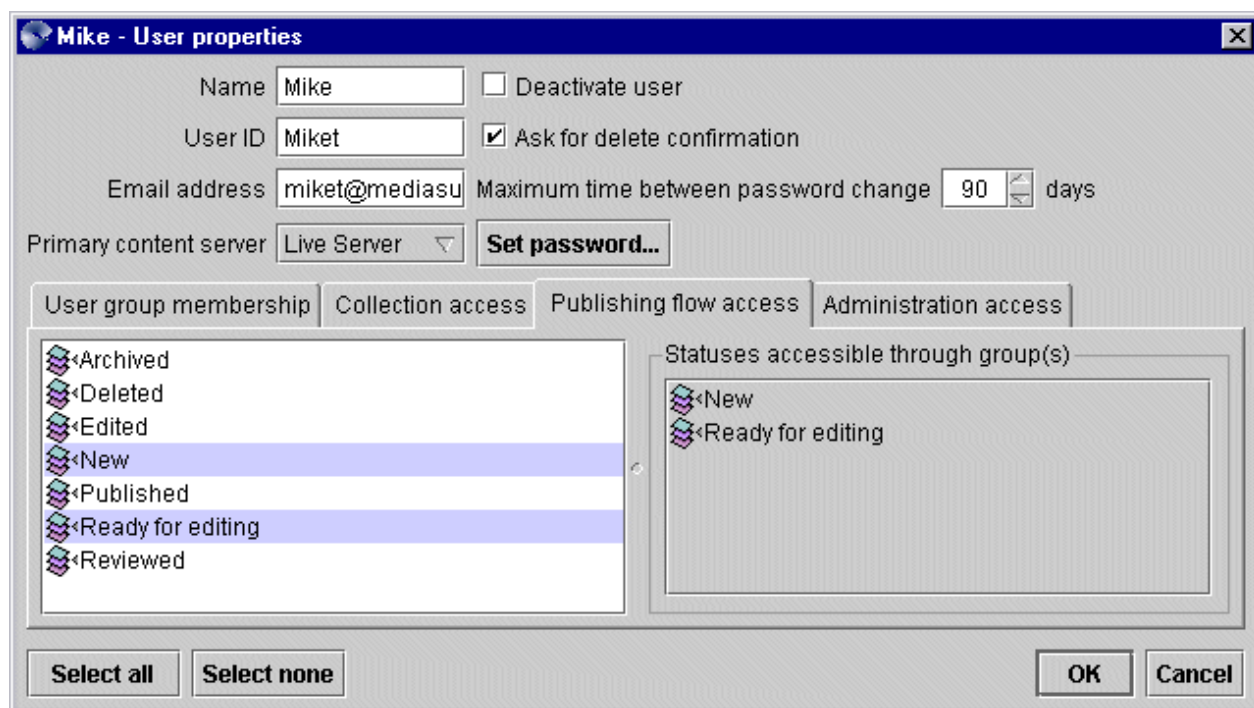
Figure 53. User access to publishing flow

For a description of the fields above the tab, refer to "Working with site users", page 53.

The left pane contains all the publishing statuses in the site. Assuming that there are no other restrictions, the current user can access items having any of the highlighted statuses.
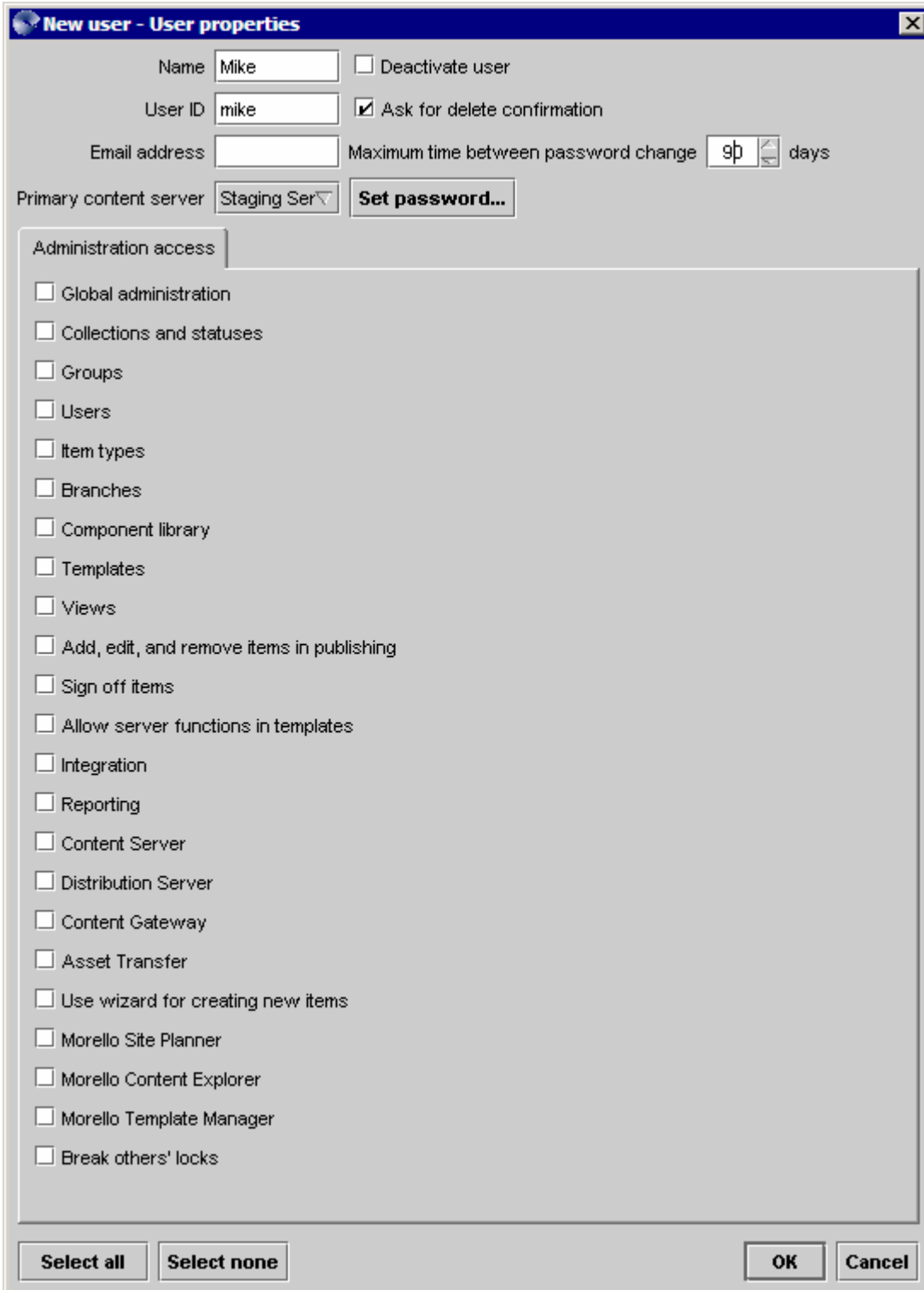
The right pane contains the publishing statuses that the user can access due to membership of groups.

5.14 Granting administration access rights to a user

You can specify which administration rights a user can have.

To grant administration rights to a user:

1.   Click the **Publishing flow access** tab in the **User properties** window (Figure 50, page 54).

2.   Select the administration rights that the current user can have.

Figure 54. User administration access

For a description of the fields above the tab, refer to "Working with site users", page 53.

Unless otherwise specified, the Administration access tab grants user rights in the Content Rules Console.

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Collections and statuses	When checked, the current user is allowed to define collections and statuses.
Groups	When checked, the current user is allowed to create and edit groups.
Users	When checked, the current user is allowed to create and edit users.
Item types	When checked, the current user is allowed to create and edit leaf item types.
Branches	When checked, the current user is allowed to create and edit branch item types.
Component library	When checked, the current user is allowed to create and edit components.
Templates	When checked, the current user is allowed to create and edit templates.
Views	When checked, the current user is allowed to create and edit views.
Add, edit, and remove items in publishing	When checked, the current user is allowed to add, edit, and remove items in publishing. This privilege applies in the Content Rules Console and in the browser.
Sign off items	When checked, the current user is allowed to sign off items to the next publishing status, if the user has access to the current publishing stage. This privilege applies in the Content Rules Console and in the browser.
Allow server functions in templates	When checked, the current user is allowed to insert server functions in templates.
Integration	When checked, the current user is allowed to use the integration module.
Reporting	When checked, the current user is allowed to use the reporting module.
Content Server	When checked, the current user is allowed to edit the content server properties in the Content Rules Console.
Distribution Server	When checked, the current user is allowed to edit the distribution server properties in the Content Rules Console.
Content Gateway	When checked, the current user is allowed to use the content gateway
Asset Transfer	When checked, the current user is allowed to use the Asset Transfer module.
Use wizard for creating new items	When checked, the user is presented with a wizard when creating a new item. The wizard guides the user through the steps needed to create the item.
Morello Site Planner	When checked, the current user is allowed to use the Site Planner in Morello.
Morello Content Explorer	When checked, the current user is allowed to use the Content Explorer in Morello.
Morello Template Manager	When checked, the current user is allowed to use the Template Manager in Morello.
Break others' locks	When checked, the current user is able to unlock things that are currently locked by others.
Select all	Click this button to check all the access rights.
Select none	Click this button to remove checks from all access rights.

Description of the Administration access tab

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6 Setting up item types

6.1 Displaying global item types

Global item types are available to all sites; site item types are available only in the site in which you create them. To display site item types, refer to "Displaying site item types", page 63.

You can't create items from global item types; but you can base other item types on global types. If you want to create identical item types over several sites, this is the quick way to create them.

To display global item types:

1. In the Morello main window, click **Global**.
2. Click **Administration**.
3. Click the **Global item types** tab.
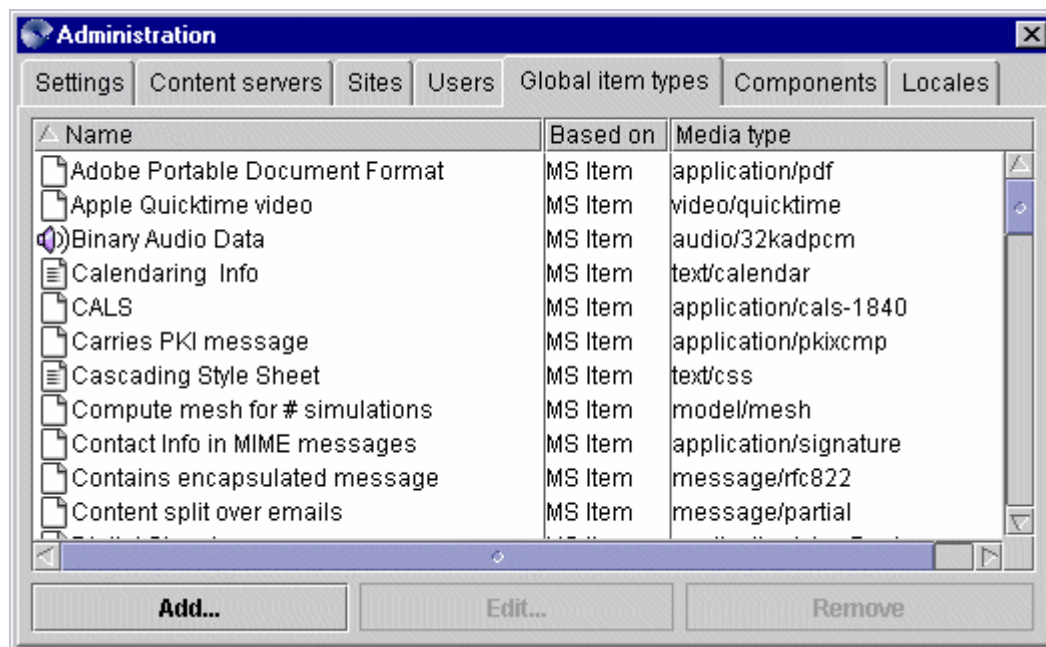
Figure 55. Displaying global item types

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Name	The name of the item type.
Based on	You must base your new item type on a previously created item type. If you later change the parent item type, any item type based on the parent does not change.
Media type	A description of the media type of the item type. For examples, you should scroll down Figure 55 to see what currently exists. If you have previously selected something from the **Based on** drop-down list, there will automatically be an entry in **Media type**.
Add	To add a new item type, click **Add**. Refer to "Working with global item types", next section.
Edit	To edit an item type, select the item type from the list and click **Edit**. Refer to "Working with global item types", next section.
Remove	To remove an item type, select the item type from the list and click **Remove**.

Description of the Global item types tab

6.2   Working with global item types

You can add a global item type, or edit the details of an existing global item type.

You can do the following:

- Create a new item type based on an existing item type.
- Specify whether items based on that item type are editable.
- Specify details of the wizard used to create items.
- Define the fields.
- Use SQL queries to populate fields from an external database.
- Specify standard text on each page of that item type.

To work with global item types:

1. Display the **Global item types** tab (see previous figure).
2. Click the **Add** button, or select an item from the list and click **Edit**.

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Figure 56. Working with global item types

If you compare this window with the **Item type properties** window (Figure 58, page 64), you see that both windows contain tabs for **Wizard panels**, **Fields**, **SQL**, and **Presets**. The contents of these tabs are identical, so they are only described once in the sections dealing with site item types.

Name	The name of the item type.
Based on	You must base your new item type on a previously created item type.
Media type	A description of the media type of the item type. For examples, you should scroll down Figure 55 to see what currently exists. If you have previously selected something from the **Based on** drop-down list, there will automatically be an entry in **Media type**.
Icon	Icon that is displayed with the item type in any list, such as shown in Figure 57, page 63. When you select an item type from the **Based on** drop-down list, your new item type will have the same icon as the selected item type. You can change the icon by scrolling down the **Icon** list.
Locale	The locale that items of this type will default to.
Private cache time	The period of time that multimedia items of this item type will be cached within a browser. The default setting for all item types is one day.
Public cache time	The period of time that multimedia items of this item type will be cached within a proxy server. The default setting for all item types is one day.
Able to be edited	When checked, items of the current type will be editable. You might want to prevent items that are messages in a thread from being later edited.

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Wizard panels	Allows you to use wizards when creating items of the current item type.
Fields	Allows you to display fields for global item types. Refer to "Displaying fields for item types", page 68.
SQL	Allows you to populate fields using SQL queries on a database. Refer to "Populating fields using SQL queries on a database", page 77.
Presets	Allows you associate preset text, such as a copyright, to a function key. Refer to "Assigning preset text such as copyright", page 79.

Description of the Global item type properties window

6.3   Displaying site item types

Use the window to display site item types. To display global item types, refer to "Displaying global item types", page 60.

To display site item types:

1.   In the Morello main window, click **Structure**.

2.   Click **Types**.
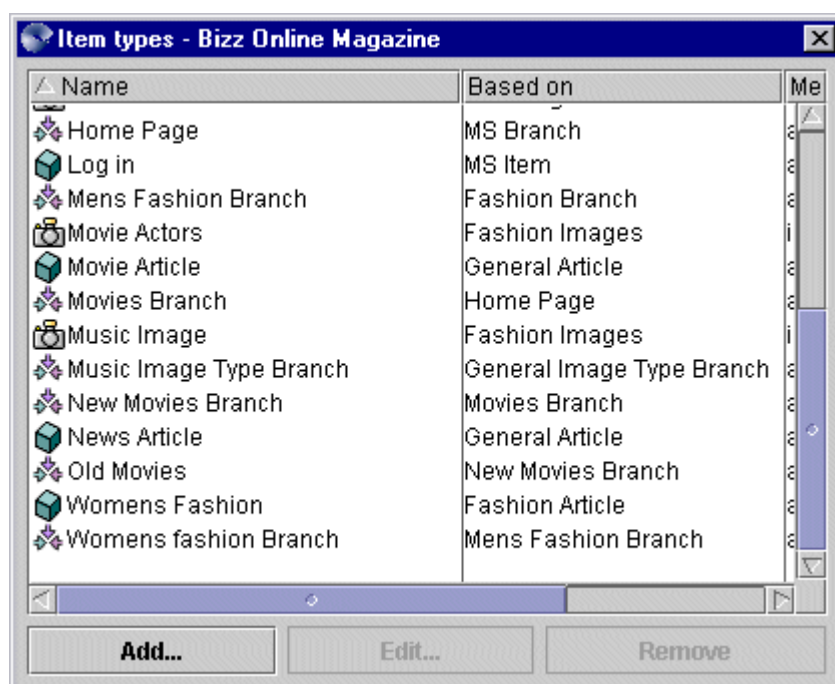
Figure 57. Displaying site item types

Name	The name of the item type.
Based on	You can base your new item type on a previously created item type.
Media type	A description of the media type of the item type. For examples, you should scroll down Figure 55 to see what currently exists. If you have previously selected something from the **Based on** drop-down list, there will automatically be an entry in **Media type**.
Add	To add a new item type, click **Add**. Refer to "Working with site item types", next section.
Edit	To edit an item type, select the item type from the list and click **Edit**. Refer to "Working with site item types", next section.
Remove	To remove an item type, select the item type from the list and click **Remove**.

Description of the Item types window

6.4   Working with site item types

You can specify all the attributes for an item type, such as wizards, fields, attach points, and so on.

To work with site item types:

1.   Display the site item types list (see previous figure).
2.   Click the **Add** button, or select an item from the list and click **Edit**.

Figure 58. Working with site item types

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Name	The name of the item type.
Collection	You can add the current item type to a collection.
Based on	You can base your new item type on a previously created item type. If you later change the parent item type, any item type based on the parent remains unchanged.
Icon	Icon that is displayed with the item type in any list, such as shown in Figure 57, page 63. When you select an item type from the **Based on** drop-down list, your new item type will have the same icon as the selected item type. You can change the icon by scrolling down the **Icon** list.
Media type	A description of the media type of the item type. For examples, you should scroll down Figure 55 to see what currently exists. If you have previously selected something from the **Based on** drop-down list, there will automatically be an entry in **Media type**.
Locale	The locale that items of this type will default to.
Private cache time	The period of time that multimedia items of this item type will be cached within a browser. The default setting for all item types is one day.
Public cache time	The period of time that multimedia items of this item type will be cached within a proxy server. The default setting for all item types is one day.
Able to be edited	Check the box if you want items of the current type to be editable. You might want to prevent items that are messages in a thread from being later edited.
Wizard panels	Allows you to use wizards when creating items of the current item type. Refer to "Working with wizards for item type", page 66.
Fields	Allows you to display, and edit, fields for global item types. Refer to "Displaying fields for item types", page 68.
Composite types	Allows you to assign composite item types to the new item type. Refer to "Assigning composite item types to new item types", page 71.
Attach points	Mandatory. Allows you to specify attach points for your item type. Refer to "Specifying the attach points for site item types", page 72.
Publishing flow	Mandatory. Allows you to specify the publishing flow for each item that has the current item type. Refer to "Displaying the publishing flow for an item type", page 73.
Groups access	Allows you to specify which groups can access your newly created item type. Refer to "Specifying who can access your item types", page 80. Note that the Groups access tab only appears when you are creating a new item type.
Related types	Allows you to link leaf items to each other. Refer to "Specifying related types", page 80.
SQL	Allows you to populate fields using SQL queries on a database. Refer to "Populating fields using SQL queries on a database", page 77.
Presets	Allows you associate preset text, such as a copyright, to a function key. Refer to "Assigning preset text such as copyright", page 79.

Description of the Item type properties window

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6.5   Working with wizards for item types

In the Content Rules Console, users can create new items "manually", or by using a wizard. You set the option in the **Administration access** tab (refer to "Working with global users", page 41, and "Working with site users", page 53). If an item type has many fields, it might make life easier for the content author if the fields are presented a few at a time using wizards. Each wizard can present a few fields. The wizard panel determines the sequence in which wizards are presented to the content author who creates an item of the specified item type. You must have at least one wizard for each item type.

The wizard panel in the next figure shows that three wizards have been specified for item type **Movie Article**: **Author Details**, **Article Details**, and **Misc**. The wizards will be presented to the content author in that sequence.

The fields for item type **Movie Article** are shown in Figure 61, page 68. In our sample site, the fields in each wizard are as shown in Table 2.

Wizard	Field Name
Author Details	Author's Name (subscriber)
	Editor (subscriber)
Article Details	Header
	Section1
	Section_2 (subscriber)
	Body_text1
	Body_text2 (subscriber)
	Movie Rating
Misc	Misc (subscriber)

Table 2

Figure 62, page 70, shows that the field **Header** is in the wizard **Article Details**.

To work with wizards for an item type:

1. Click the **Wizard panels** tab shown in Figure 58, page 64 for site item types; and Figure 56, page 62 for global item types.
2. Specify the wizard details and click **OK**.

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Figure 59. Working with wizards

For a description of the fields above the tab, refer to Figure 58, page 64 for site item types; and Figure 56, page 62 for global item types.

Name	The name of the wizard.
Description	Information about the wizard optionally entered by the wizard creator.
Add	Allows you to add a new wizard. The **Wizard properties** window appears (next figure).
Edit	Allows you to edit the details for an existing wizard. The **Wizard properties** window appears (next figure).
Remove	Allows you to remove a wizard.
	Allows you to move a wizard nearer the top of the list.
	Allows you to move a wizard nearer the foot of the list.

Description of the Wizard panels tab

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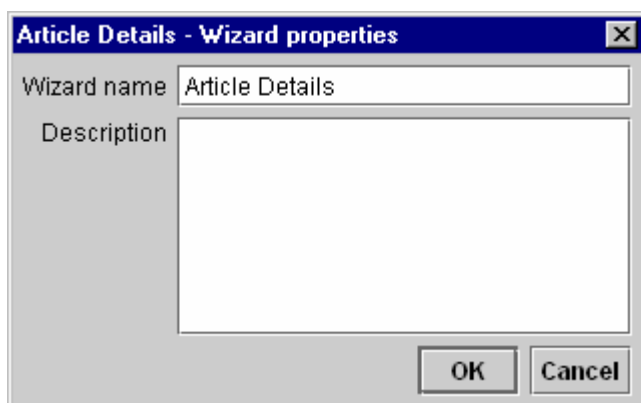
Figure 60. Wizard properties

6.6 Displaying fields for item types

To display fields for item types:

Click the **Fields** tab shown in Figure 58, page 64 for site item types; and Figure 56, page 62 for global item types.

Figure 61. The Fields tab for item types

For a description of the fields above the tab, refer to Figure 58, page 64 for site item types; and Figure 56, page 62 for global item types.

All the tab entries can be edited by selecting a row and clicking **Edit**. Refer to "Working with fields for item types", next section.

Name	The field name.
Field type	The type of field: String, Integer, Date, URL, Post Code, or Phone Number.
Length	Maximum permitted number of characters.
Searchable	Indicates whether the row is independently searchable using indexes.
Mandatory	Indicates whether the field must contain a value. If not mandatory, the field can be left blank.
Editable	Indicates whether the field contents can be edited.
Web server name	Name of the field in the Oracle database on the server. It is used to specify the field in templates. The server name can contain a maximum of 32 characters. Spaces are not permitted.
Add	To add a field, click **Add**. Refer to "Working with fields for item types", next section.
Edit	To edit a field, select a field from the list and click **Edit**. Refer to "Working with fields for item types", next section.
Remove	To remove a field, select a field from the list and click **Remove**.
Arrow up	Allows you to move a field nearer the top of the panel in the wizard dialog box (refer to "Working with wizards for item types", page 66).
Arrow down	Allows you to move a field nearer the foot of the panel in the wizard dialog box (refer to "Working with wizards for item types", page 66).

Description of the Fields tab

6.7 Working with fields for item types

You can specify details for individual fields for item types, such as the length and type of field, and whether it is mandatory or searchable. You can force the author to choose from a list of valid values. If you have large numbers of valid values, you can import these from a comma-separated text file.
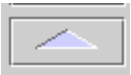
To work with fields for item types:

1. Display the **Fields** tab (refer to previous window).

2. Click **Add**, or select a field and click **Edit**.

     The **Field properties** window appears.

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Figure 62. Field properties for item types

Name	The name of the field.
Type	Click the down arrow to open a list of valid field types: String, Integer, Date, URL, Post Code, or Phone Number.
Web server name	Name of the field in the Oracle database on the server. It is used to specify the field in templates. The server name can contain a maximum of 32 characters. Spaces are not permitted.
Maximum length	The maximum number of characters, including spaces that the field can hold. You should set a realistic value that reflects the intended content of the field
Context searchable	When checked, the contents of the field are searchable in a Web browser. For example, if the item type is **Newspaper Article**, and the current field type is **Date**, you can search for all newspaper articles by date.
Mandatory	When checked, the content authors must enter a value in the field.
Editable	When checked, users with editing rights can edit the contents of the field.
Wizard panel	You can allow the content author to use a wizard to input the field value for the current field. Click the down arrow to select the wizard that will be used. The wizard must previously have been defined (refer to "Working with wizards for item type", page 66).
Help	You can enter some advice to content authors about the contents of the current field.
Valid values	Specifying one or more valid values forces the content authors to choose one of these values to enter into the field. For example, if the item type is **Newspaper Article**, and the field name is **Subject**, then a list of valid values could be **World News**, **Politics**, **Sport**, and so on. The content authors are prevented from entering a value that is not on the list.

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Add	To add a value to the list, type the value to the list, and click **Add**. The new value appears in the list box.
Update	Allows you to edit a selected value. The value is displayed in the **Valid values** field. Edit the value, and click **Update**.
Remove	Allows you to remove a selected value. The value is displayed in the **Valid values** field. Click **Remove**.
Default	To select the default value that appears in a drop-down list, select the value and click **Default**.
	Allows you to move a valid value nearer the top of the list.
	Allows you to move a valid value nearer the foot of the list.
Import	Allows you to import valid values from a comma-separated file.

Description of the Field properties window

6.8 Assigning composite item types to new item types

In Morello, the term *composite type* is used for any multimedia file, such as graphics or sound files. You can specify the composite types to be assigned to a new item.

Figure 63, page 72 shows the composite item types that have been assigned to the **Movie Article** item type..

To assign composite item types for item types:

1. Click the **Composite types** tab shown in Figure 58, page 64.

2. From the list of composite types, select the types to be assigned to the current item type.

3. Click **OK**.

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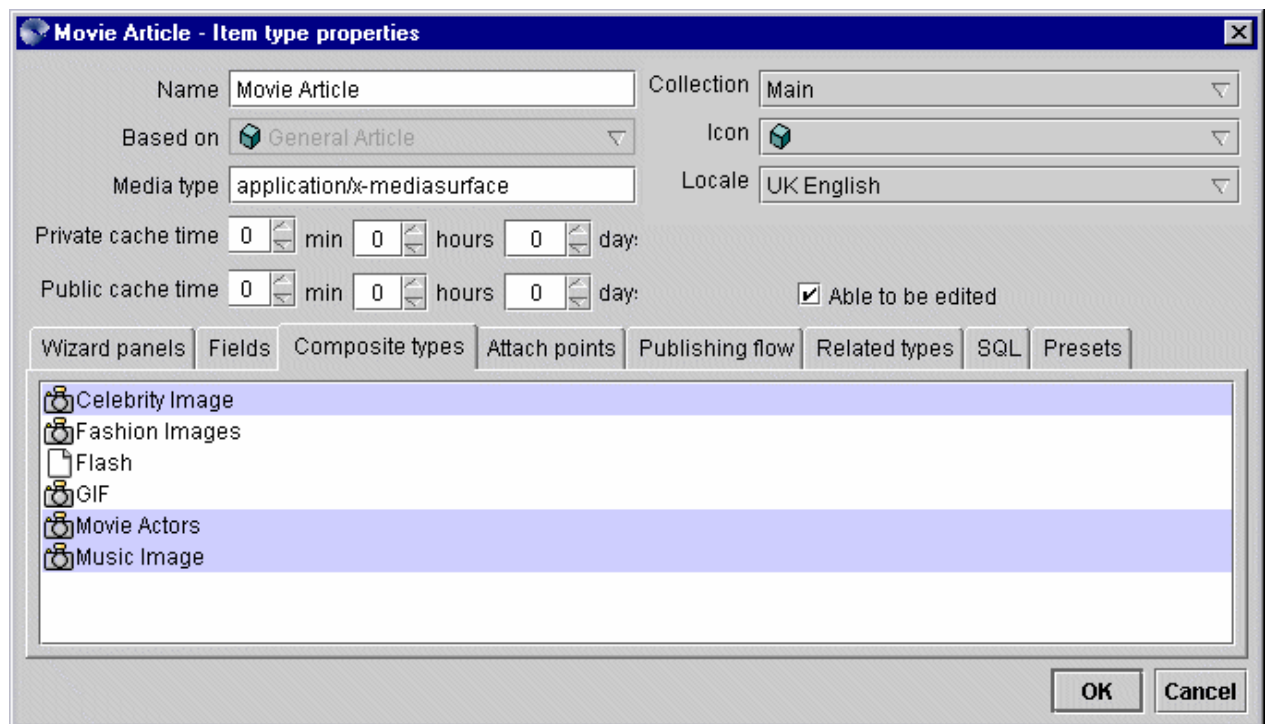
Figure 63. Assigning composite item types to new item types
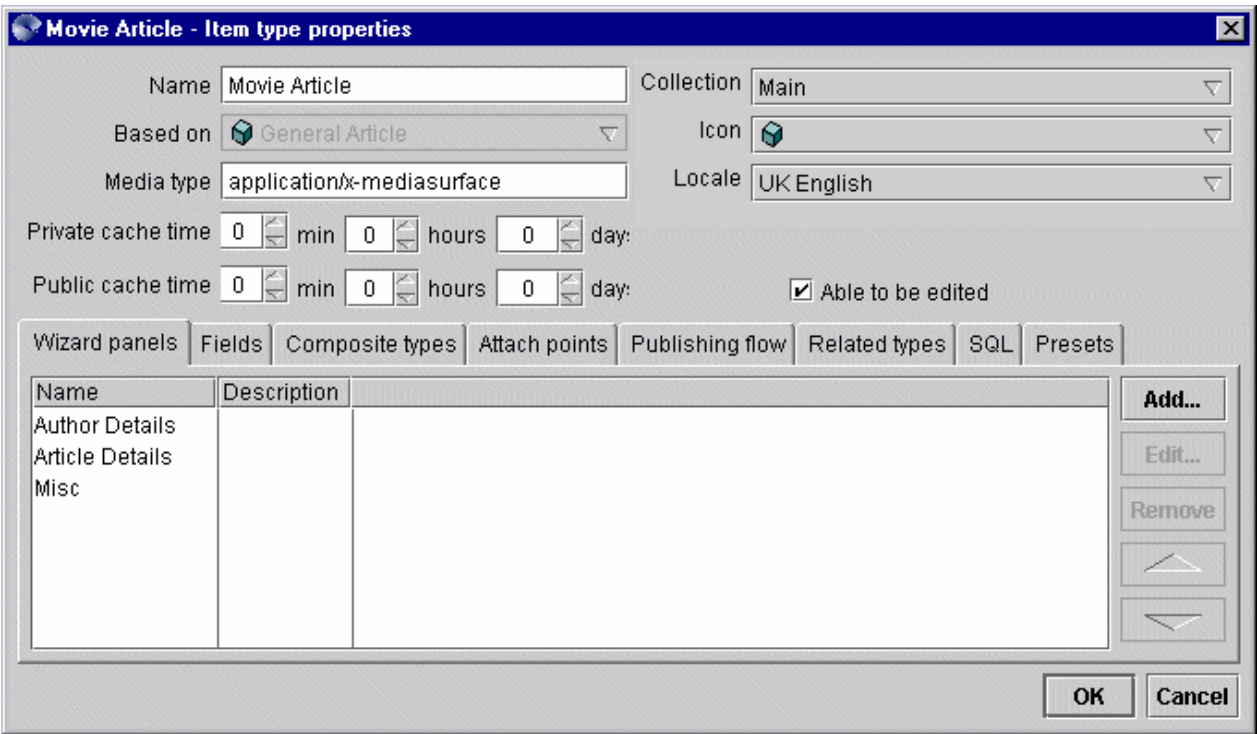
For a description of the fields above the tab, refer to Figure 58, page 64 for site item types; and Figure 56, page 62 for global item types.

The list contains all the composite types.

6.9   Specifying the attach points for site item types

To be visible in a user's browser, any item that you create must be attached to your site structure. Attaching an item to your site is the same as ensuring that a site page contains a link to your newly created item. You attach an item to your site by using attach points.

If you specify several attach points, you must specify a *primary* attach point. This is the attach point that will generate the URL for the leaf page.

You can specify *free attachment*. This allows the content author to attach a newly created item to whichever branch she chooses.

Figure 64 shows that the **Movie Article** item type is attached to the **Movies** branch.

To specify attach points for site item types:

1.   Click the **Attach points** tab shown in Figure 58, page 64 for site item types; and Figure 56, page 62 for global item types.

2.   Specify the details for the attach point and click **OK**.
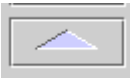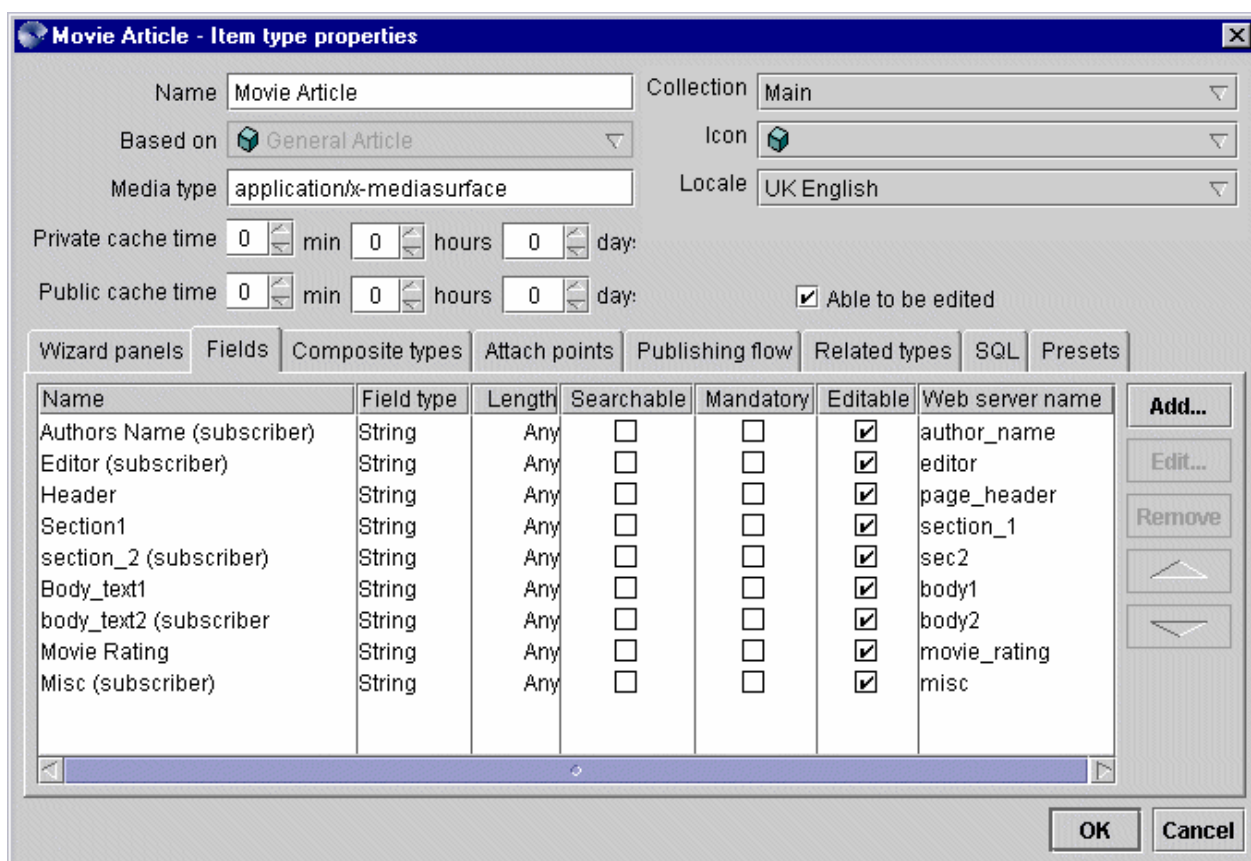
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Figure 64. Specifying attach points

For a description of the fields above the tab, refer to Figure 58, page 64 for site item types; and Figure 56, page 62 for global item types.

Name	The name of the item type.
Mandatory	If a box is checked, it signifies that the corresponding branch is a mandatory attach point.
View	Allows you present the Web page in different ways depending on how you navigate to the page.
Allow free attachment	If you have no site structure, or if the structure is only partially complete, check this box. Later, when the appropriate structure is in place, you can edit the attach points.
Primary	The primary attach point for an item type within the site structure. To set a primary attach point , highlight an item in the site structure, and click **Primary**.

Description of the Attach points tab

6.10   Displaying the publishing flow for an item type

You can choose which publishing statuses will apply to new items of the current type. You must have at least one publishing status when you create a new item. For information on statuses, refer to "Working with publishing statuses", page 34.

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To display the publishing flow for a site item type:

1.   Click the **Publishing flow** tab shown in Figure 58, page 64.

2.   Specify publishing flow details and click **OK**.

Figure 65. Displaying Getting started for an item type

For a description of the fields above the tab, refer to Figure 58, page 64 for site item types; and Figure 56, page 62 for global item types.

Status	The names of the publishing statuses in the list.
Sign off a new version	Indicates whether a new copy of the current item is to be created before it moves on to the next publishing status. If you create a new copy of the document, and then make extensive changes later on, you can still revert to the current copy if the later changes are not approved. You can edit this checkbox by clicking **Edit**. Refer to "Working with the publishing flow for an item type", next section.
Make viewable	Indicates whether the item is viewable on a user browser at that publishing stage. You can edit this checkbox by clicking **Edit**. Refer to "Working with the publishing flow for an item type", next section. Once an item is made viewable, it remains viewable for the remainder of its lifetime, unless you create a new version when signing it off. This new version of the item is not viewable until it passes through a state that makes it viewable. When this happens, all previous versions of the item become non-viewable. This means that a Morello user can edit the new version of the item while the web server is still serving the old version up.

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Keep up to … version of all items of this type	You can specify how many versions can be kept.
Circular publishing flow	Check this box if you expect that the item is constantly evolving. When the publishing flow reaches the last status, the item automatically acquires the first status.
Add	To add a status to the publishing flow, click **Add**. Refer to next figure.
Edit	To edit the details for a publishing status, select the status and click **Edit**. Refer to next figure.
Remove	To remove a publishing status, select the status and click **Remove**.
Arrow up	Allows you to move a selected publishing status nearer the top of the list.
Arrow down	Allows you to move a selected publishing status nearer the foot of the list.

Description of the Publishing flow tab

6.11   Working with the publishing flow for an item type

To work with the publishing flow for an item type:

1.   Click the **Publishing flow** tab (refer to previous window).

2.   To add a status, click **Add**.

To edit a status, select a status in the list, and click **Edit**.

Figure 66. Working with publishing flow

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Status	A drop-down list containing all the statuses available to your site.
manually	Allows you to manually sign off the status at any time. Select **manually** or **automatically**.
automatically	Allows you to specify that the item is automatically signed off after the time that you specify in **days** and **hours**. Select **manually** or **automatically**. The clock starts at the time the item advances to the current status.
after	When this radio button is selected, you can specify the time that elapses before automatic signoff. The maximum permitted elapsed time is 9999 days and 23 hours.
at specified time	If this radio button is selected, the content author is allowed to specify a signoff time during creation of an item of the current type.
Make viewable	Check this box to make the items of the current type viewable when the items arrive at the currently selected status. Viewers must have the relevant access rights. Once an item is made viewable, it remains viewable for the remainder of its lifetime, unless you create a new version when signing it off. If you create a new version of an item when signing it off, the new version of the item is not viewable until it passes through a state that makes it viewable. When this happens, all previous versions of the item become non-viewable. This means that a Morello user can edit the new version of the item while the web server is still serving the old version up.
Notify by email	Allows you to specify the users to be notified by e-mail when the item arrives at the currently selected status (refer to "Specifying who to notify after signoff", next section). To use this feature, `sendmail` must be configured in the host file.
Sign off a new version to the next status	Indicates whether a new copy of the current item is to be created before it moves on to the next publishing status. If you create a new copy of the document, and then make extensive changes later on, you can still revert to the current copy if the later changes are not approved. You can edit this checkbox by clicking **Edit**. Refer to "Working with the publishing flow for an item type", next section.
Forbid last user to sign off	When checked, stops the last user who worked on the item to sign it off. This is to ensure that the item can be checked by another user.
Reject status	A drop-down list of all statuses for the current item type. For the current status, you can select which status the item will revert to if it is rejected.

Description of the Item type status properties window

6.12   Specifying who to notify after signoff

To specify who to notify after signoff:

1. Click **Notify by e-mail** in the previous window.

   The **E-mail notification of signoff** window appears (Figure 67, page 77).

2. Click one of the user groups in the left list box.

   The members of that access group are displayed in the **Corresponding users** list.

3. Click **OK**.

   You can now select a different access group in the left list box and repeat the process.

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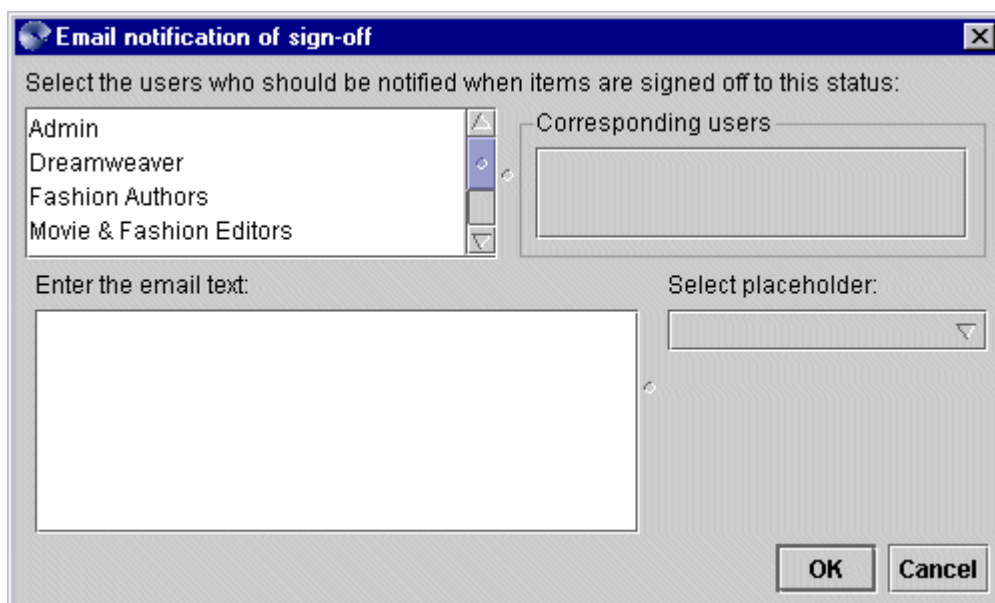
Figure 67. Specifying who to notify after signoff

The left list box contains all the user groups.

Corresponding users	When you select a group in the left list box, the names of the group members appear in the **Corresponding users** list.
Enter the e-mail text	Enter the text
Select placeholder	A drop-down list containing information about the item, such as site, user, author, current status and URL. You can select as many pieces of information as you want. Each selection appears in the **Enter the e-mail text** box. When the e-mail is sent, it will contain these pieces of information that specifically apply to the item that was signed off. This helps the recipient to identify which item was signed off.

NOTE: If you are configuring an email message for use with the Microsoft Outlook Morello plug-in, you should include the URL tag enclosed within url tags. Without these, then the Morello Outlook toolbar will not function correctly. For example:

```
Hello.
The $item{'itemname'} item, authored by
$item{'author'} has moved to its next status in its
workflow. You are responsible for reviewing this item
at this stage.
The item is located at:
<url>$item{'url'}</url>
Thank you.
```

See the Morello online help documentation for further information about this plug-in.

Description of the E-mail notification of signoff window

6.13 Populating fields using SQL queries on a database

You can populate fields with selected values from a database.

To populate fields for item types:

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1.   Click the **SQL** tab shown in Figure 58, page 64 for site item types; and Figure 56, page 62 for global item types.

2.   Specify the details and click **OK**.

Figure 68. Populating fields using SQL queries on a database

For a description of the fields above the tab, refer to Figure 58, page 64 for site item types; and Figure 56, page 62 for global item types.

External Fields	Enter the names of the external fields that you wish to interrogate in the external database, separated by columns.
External SQL	Type the SQL query.

Description of the SQL tab

The SQL statement can make use of any of the standard **$client**, **$request** and **$item** properties.

Example: Assume you have two fields called maxtemp and mintemp in a table called weather. You want to populate corresponding Morello fields called maximum_temp and minimum_temp.

In External Fields, type:

```
maximum_temp, minimum_temp
```

In External SQL, type:

```
SELECT maxtemp, mintemp
FROM weather @databasename
WHERE city = $item{'name'}
```

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Note that the table or other database objects must be visible from the Morello Oracle user. At present, you can only use the SQL panel to retrieve objects. You cannot update external tables. Use the Content Gateway (refer to *Morello Modules Guide*) for this purpose.

6.14   Assigning preset text such as copyright to function keys

You can specify, for the current item type, the text that should be associated with each function key, f1 through f8. Later, when you are creating items, you can simply press the appropriate function key rather than type in the text.

Of course, if the text is to appear in every item of the current item type, then it might be easier to insert it as a component in a template (refer to "Setting up components, views and templates", page 83).

To assign or edit preset text:

1.   Click the **Presets** tab shown in Figure 58, page 64 for site item types; and Figure 56, page 62 for global item types.

2.   Select a function key to assign text to, or to edit.

3.   Enter the preset text, or edit the existing text and click **OK**.
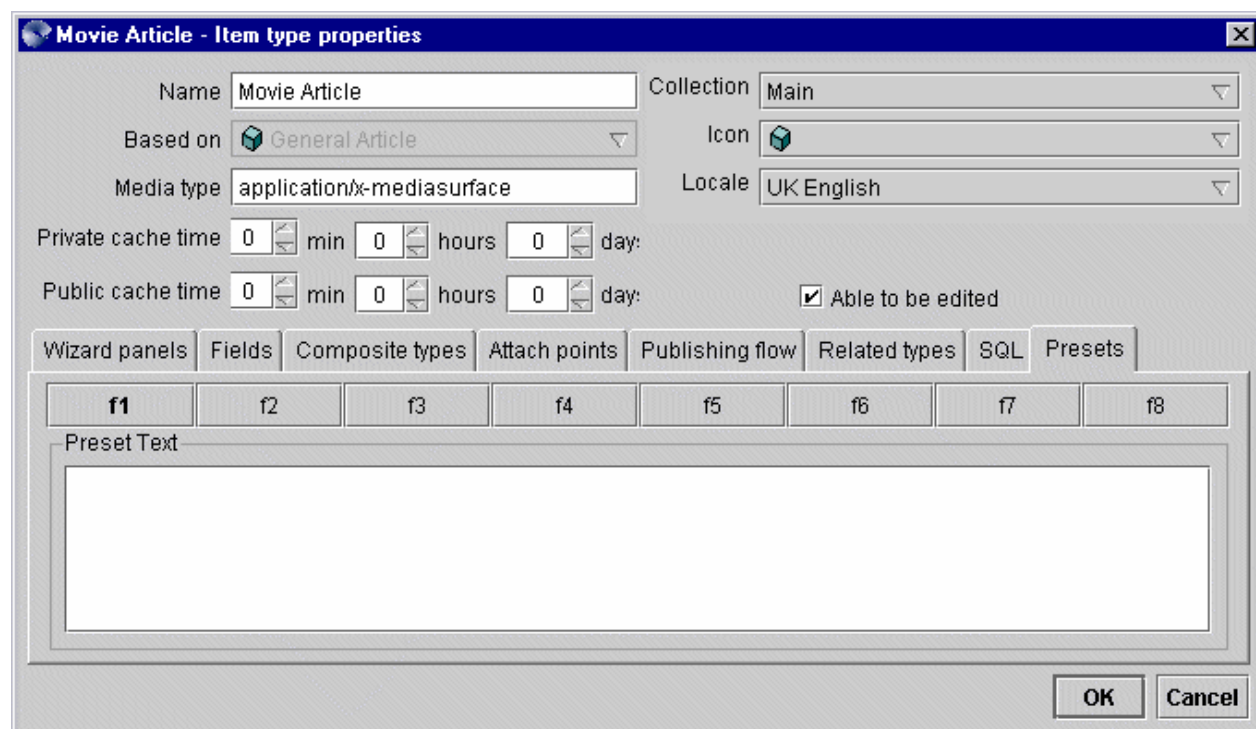
Figure 69. Adding preset text

For a description of the fields above the tab, refer to Figure 58, page 64 for site item types; and Figure 56, page 62 for global item types.

Preset Text	Enter the text.

Description of the Presets tab

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6.15   Specifying who can access your item types

When you are creating a new item type, you can specify which groups can access this new item type. You can only do this with new item types, because only then is the **Groups access** tab displayed. If you later need to edit information that relates item types and groups, use the **Item type access** tab in the **Group properties** window (refer to "Granting group access to item types", page 46).

To specify who can access your item types:

1.   Click the **Groups access** tab shown in Figure 70, below.
2.   Select the groups that you want to be able to access your new item type.
3.   Click **OK**.

Figure 70. Allowing group access to an item type

For a description of the fields above the tab, refer to Figure 58, page 64 for site item types; and Figure 56, page 62 for global item types.

The list box contains all the user groups.

6.16   Specifying related types for item types

You cannot attach leaf items to each other. However, you can allow leaf items of the current item type to be related to leaf items of another item type (or of the same type) using the **Related types** tab. When the content author creates an item of the current item type, the author can then decide whether or not to link that item to another leaf item of a permitted type.

Look at the **Jennifer Love Hewitt** article (Figure 4, page 5). Although this page is a leaf item type (Figure 10, page 10), you can see that there is a link to **Jennifer Lopez walks for Gucchi**. Since you cannot link one leaf to another, you must use *related types* to link such pages.

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The effect of using related types is shown in Figure 71. Figure 72 shows that the **Movie Article** item type is related to the **Fashion Article** item type. The **Related types** tab is used to create a link from a page of the current item type to a page of the related item type.
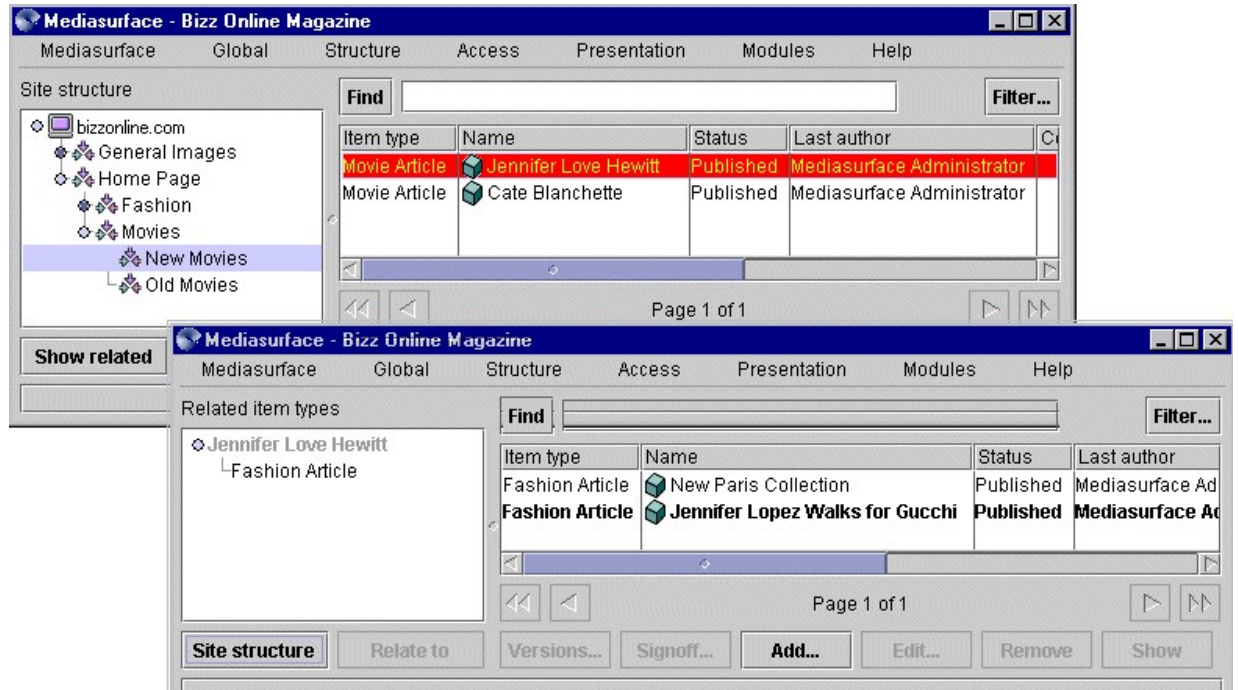
Figure 71. The Jennifer Love Hewitt article in the upper screen is linked to the Jennifer Lopez article in the lower screen.

To specify related types for the current item type:

1. Click the **Related types** tab shown in Figure 72 on page 82.

2. Select the item types that you want to be related to the current item type. If two items of the same type are to be related to each other, then the item type must be related to itself.

3. Click **OK**.

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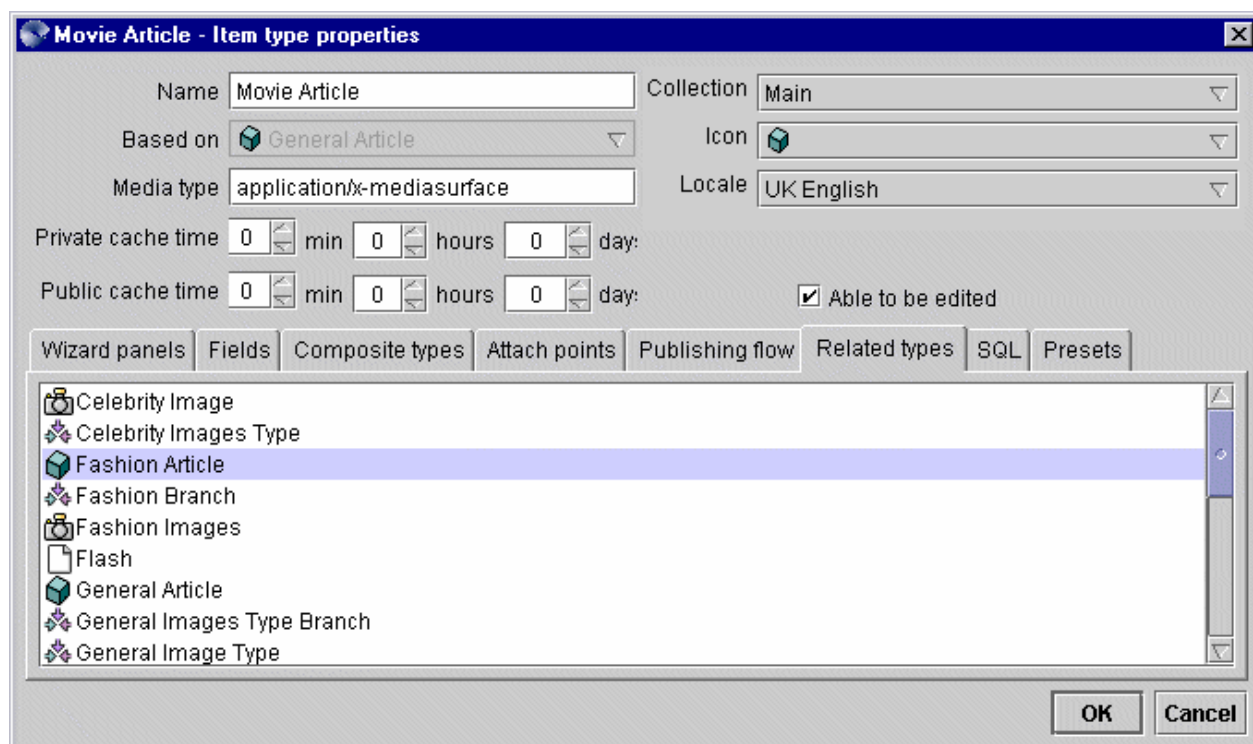
Figure 72. Relating item types to the current item type

For a description of the fields above the tab, refer to Figure 58, page 64 for site item types; and Figure 56, page 62 for global item types.

The window contains a list of all the item types in the site.

7   Setting up components, views and templates

7.1   Displaying global and site components

By using components, you can create standard template elements. You can create global components and site components.

To display global components:

1.   In the Morello main window, click **Global**.

2.   Click **Administration**.

3.   Click **Components**.
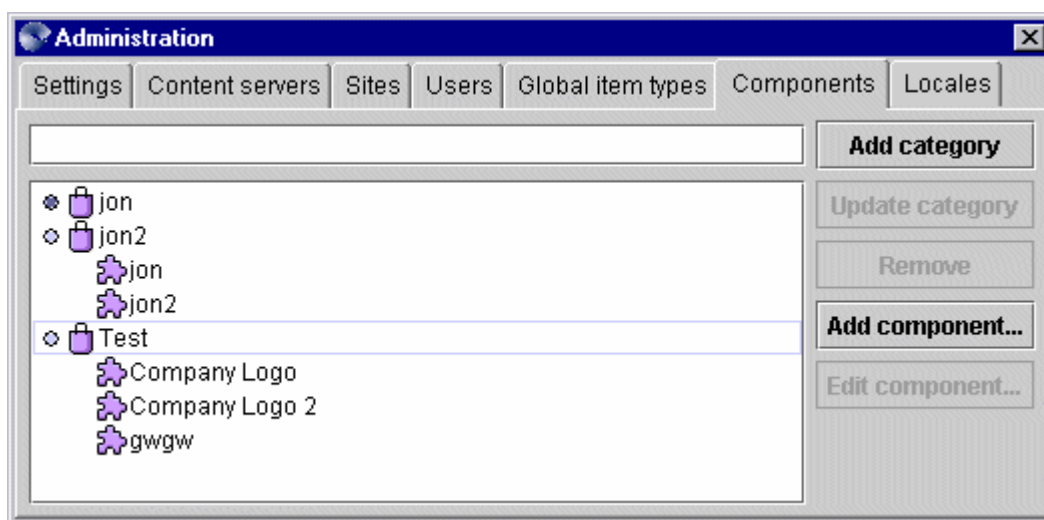
Figure 73. Global components

To display site components:

1.   In the Morello main window, click **Presentation**.

2.   Click **Components**.

Figure 74. Site components

Add category	To add a category, type the name of the category to the left of the **Add category** button, and click **Add category**.
Update category	To update the name of a category, select the name of the category in the list. The name of the category appears in the text box. Edit the name of the category. Click **Update category** again. The updated name appears in the list.
Remove	To remove a category, select the name of the category in the list and click **Remove**. The name is removed from the list.
Add component	Allows you to add a new component to a category. (Refer to "Working with components", next section.)
Edit component	Allows you to edit an existing component. (Refer to "Working with components", next section.)

Description of the global components and site components window

7.2   Working with components

The component editor is the same for global and site components.

To add a new component to a category:

Select the category in the list and click **Add component**. The component editor is displayed.

To edit an existing component:

1.   Expand the category containing the component.

2.   Select the component, and click **Edit component**.

The component editor is displayed.

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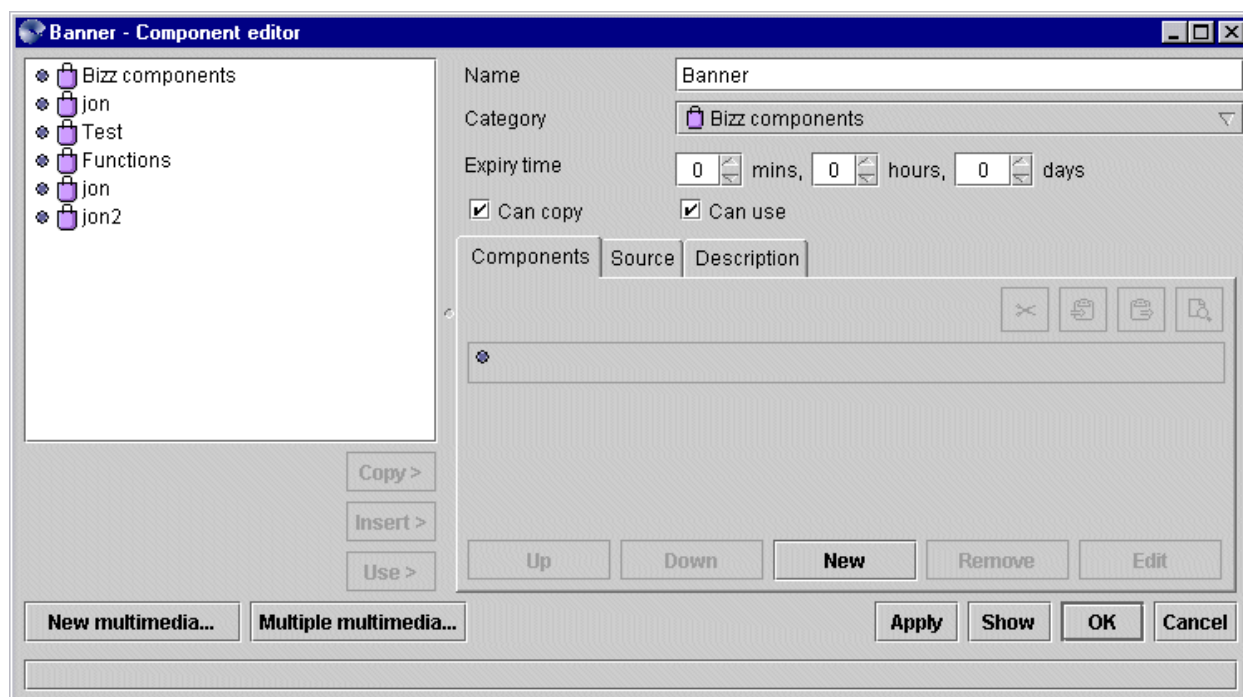
Figure 75. Component editor

The left pane contains a list of all the global and site categories. Categories that contain components can be expanded to display those components. You can copy components from the left pane into the right pane.

Copy >	If a component is selected in the left pane, you can copy that component into the component that you are working with in the right pane. If the original component is later changed, there is no effect on the copied component.
	This is a quick way to create a new component from an existing component that is similar to the component that you want to create. You simply copy the existing component, and then modify it.
Insert>	You can insert the text of a component into a selected element in the right pane. By default, new text is added after any existing text. If you don't want the text to be inserted at the end, open the element and place your cursor at the required location. The text loses any relationship to the parent component.
Use>	If a component is selected in the left pane, you can use it in the component in the right pane. If the original component is later changed, all occurrences of that component that exist in any other component or template are changed to reflect the change to the original.
	You may want standard text to appear on every page of the site. For example, a banner, or legal information. You can create that text once as a component, and use it in other components.

Left pane description

The right pane contains the facilities for creating and editing elements of the components.

Name	Name of the component (64 characters including spaces). A new component has the default name **New Component**. You can change the default name.
Category	If you are editing an existing component, the category name appears here. For a new component, click to display a drop-down list containing all the global and site categories. Select a category to contain your new component.
Expiry Time	Interval between the component being edited and the browser being refreshed by the content server.
Can Copy	When checked, the component that you are working with can later be copied into other components or templates.
Can Use	When checked, the component that you are working with can later be used in other components or templates.
Components	Tab that allows you to create and edit components.
Source	Tab that allows you to view the source code of the component that you are working with. You cannot edit source code in this window.
Description	Tab that allows you to enter a description of the component (maximum 512 characters, including spaces). You can include information about what the component does, or how to use it.
	Cuts (removes) a piece of text.
	Copies a piece of text.
	Pastes text that was previously cut or copied.
	Allows you to search your desktop or network for items to insert.
Up	Allows you to move the selected element upwards in the sequence.
Down	Allows you to move the selected element downwards in the sequence.
New	Adds a new element. You must then click the element icon to open it.
Remove	To remove an element, select the element and click **Remove**.
Edit	To edit an element, select the element and click **Edit**.

Right pane description

Note: If line breaks are required in the template, these have to explicitly put into the components.

The lower pane contains buttons relating to multimedia, and a button that allows you to preview your component in a browser.

New multimedia button	Opens a new item window, where only media item types can be created. Refer to "Importing multimedia items", on page 111.
Multiple Multimedia	Opens the **Upload multimedia items** window, where you can set attach points for the incoming multimedia. Refer to "Adding multiple multimedia items", below.
Apply	Allows you to apply the changes to the new component without closing the component editor window. The browser will be refreshed after the expiry time is reached (see description of **Expiry time**).
Show	Morello launches the browser and shows you your Web page.
OK	Saves all changes and closes the component editor window.
Cancel	Cancels any changes and closes the component editor window. If you previously clicked **Apply**, only those changes that you made since clicking **Apply** are cancelled.

Lower pane description

7.3   Adding multiple multimedia items

You can upload multiple files from a specified directory to specified attach points. Each file becomes an item of a multimedia type that you specify.

To add multiple multimedia items:

1. In the component editor (Figure 75, page 85), click **Multiple multimedia**.

   The Upload multimedia items window opens.

2. Specify the required information and click **OK**.
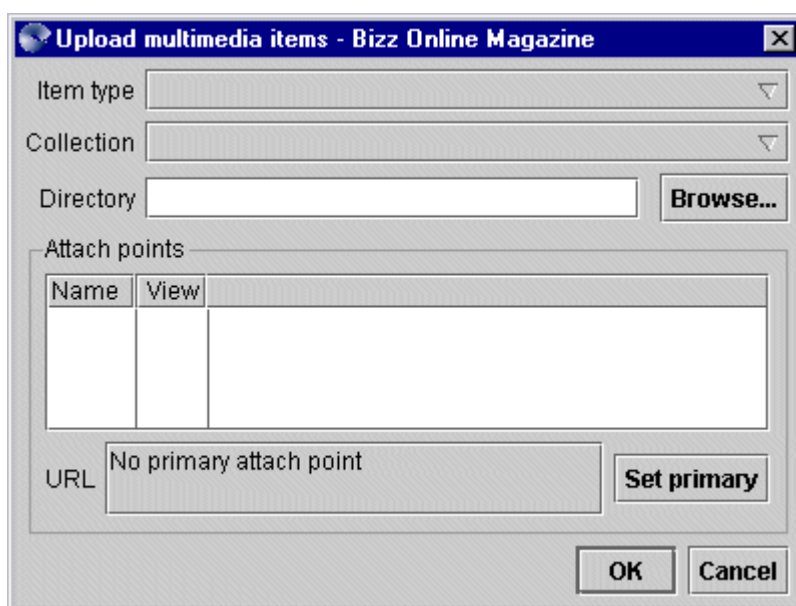
Figure 76. Uploading multiple multimedia items

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Item type	A drop-down list of all the multimedia item types.
Collection	A drop-down list of all the collections within your site.
Directory	The path for directory containing your multimedia items.
Browse	Opens a window that allows you to find the directory containing the multimedia items.
Attach Points	The branches of the site structure where you want the multimedia items to be held.
URL	The address of the attach point. For example:
	http //linux.uk.mediasurface.com/16022/*<short name>*?view=Standard&version.
	For a description of short name, refer to page 109.
Set Primary	Sets the attach point as the primary location for the multimedia items.

Description of Upload multimedia items window

7.4   Working with global views

By using views, you only need to enter content once, but display that content in different ways to different users. For an introduction to views, refer to "More about templates", page 10.

Global views are available to all sites; site views are available only in the site in which you create them. To work with site views, refer to "Working with site views", page 89.

The use of global views allows you to impose consistency on the names of views across different sites. When you add a name to the list of views, this view name becomes available to any item type. The view for each item type is implemented using its own template. For example, assume you add a view name called **Public**. Obviously the template that implements the public view of a bookseller's Web page will be different from the template that implements the public view of a list of sports results.

To work with global views:

1.   In the Morello main window, click **Global**.

2.   Click **Administration**.

3.   Click the **Settings** tab.

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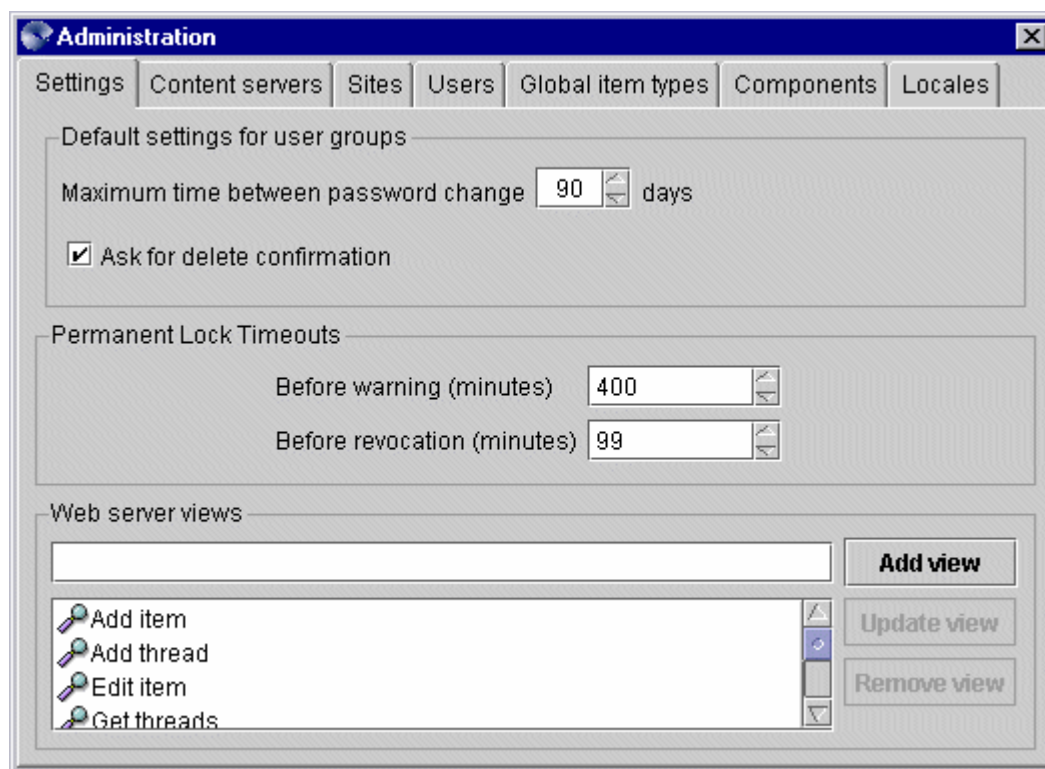
Figure 77. Global views

The Settings tab contains some administration information that is discussed in "Setting system defaults", page 20.

The list box contains all the global views.

Web server views	Text box used for adding and editing view names.
Add view	To add a new view, type the name of the new view in **Web server views** and click **Add view**.
Update view	To edit the name of a view, select the view to be edited. The selected view appears in **Web server views**. Edit the view and click **Update view**. The edited view replaces the original view in the list.
Remove view	To delete a view from the list, select the view. The selected view appears in **Web server views**. Click **Remove view**. The view is deleted from the list.

Description of the Settings tab

7.5   Working with site views

By using views, you only need to enter content once, but display that content in different ways to different users. Global views are available to all sites; site views are available only in the site in which you create them. To work with global views, refer to "Working with global views", previous section.

To work with site views:

1.   In the Morello main window, click **Presentation**.

2.   Click **Views.**
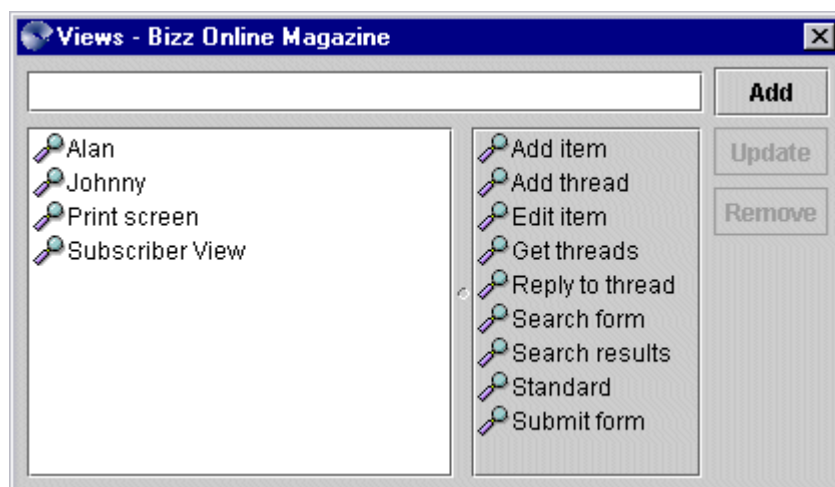
Figure 78. Site views

User-defined views are listed in the left pane. Morello-defined views appear in the right pane. You cannot edit or remove any Morello-defined view.

Add	To add a new view, type the name of the new view in the text box to the left of **Add**, and click **Add**.
Update	To edit the name of a view in the left pane, select the view to be edited. The selected view appears in the text box. Edit the view and click **Update**. The edited view replaces the original view in the list.
Remove	To delete a view in the left pane from the list, select the view. The selected view appears in the text box. Click **Remove**. The view is deleted from the list.

Description of Views window

7.6　Displaying templates

Global views and site views are implemented using templates. For an introduction to templates, refer to "More about templates", page 10.

To display templates:

1.　In the Morello main window, click **Presentation**.
2.　Click **Templates**.
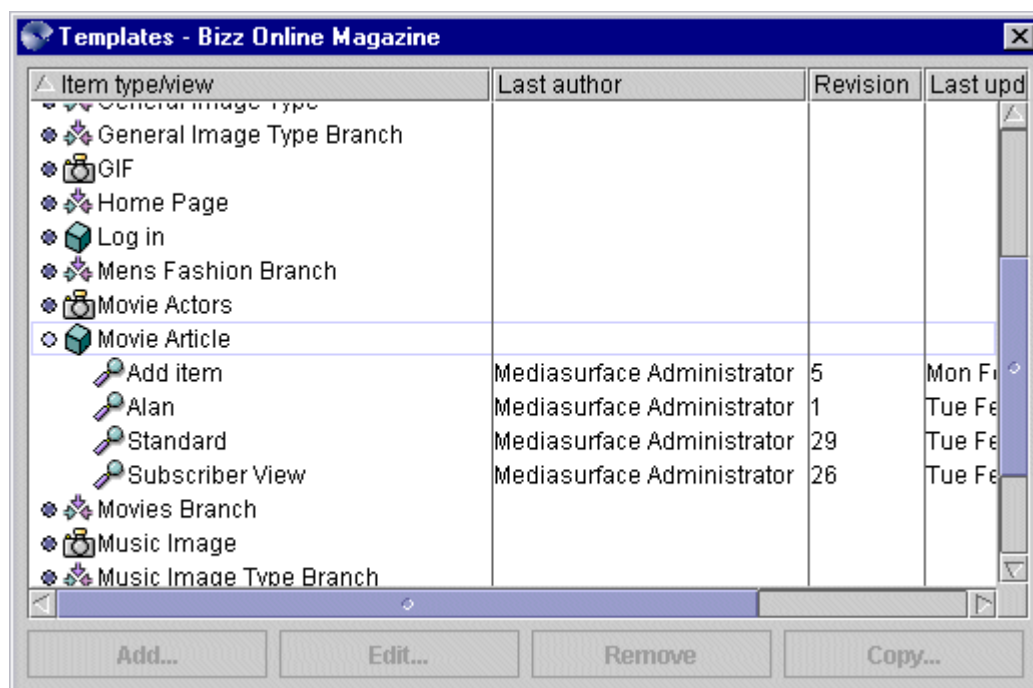
Figure 79. Templates for item types

Item type/view	A list of all the item types for the current site. Expand an item type to see the templates associated with that item type.
Last author	The name of the last person to modify the template.
Revision	The latest revision number of the template.
Last update date	Date on which the template was last updated (or the creation date if the template has never been updated).
Add	Allows you to add a new template. Refer to "Working with templates", next section.
Edit	Allows you to edit an existing template. Refer to "Working with templates", next section.
Remove	To delete a selected template, click **Remove**.
Copy	Allows you to copy the currently selected template to a different view. The view can be for the same item type or a different item type. The **Copy template** window appears (Figure 80). Select the target item type and view, and click **OK**.

Description of the Templates window
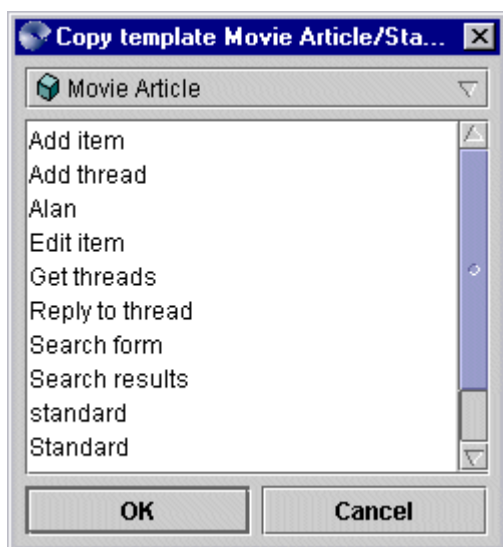
Figure 80. Item type and view that you can copy to current template

7.7 Working with templates

To add a new template:

1. In the previous window (Figure 79, page 91), select an item type and click **Add**.

   The **Select a view** window opens. This window contains a list of views having no template for the selected item type.

2. Select a view name. Click **OK**.

   The **Template editor** window opens (refer to Figure 82, page 93).
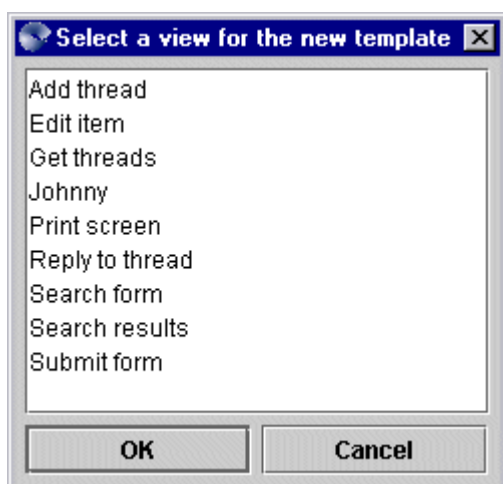
Figure 81. Views having no template for the specified item type

To edit an existing template:

In the previous window (Figure 79, page 91), select the template that you want to edit, and click **Edit**.
The **Template editor** window opens.

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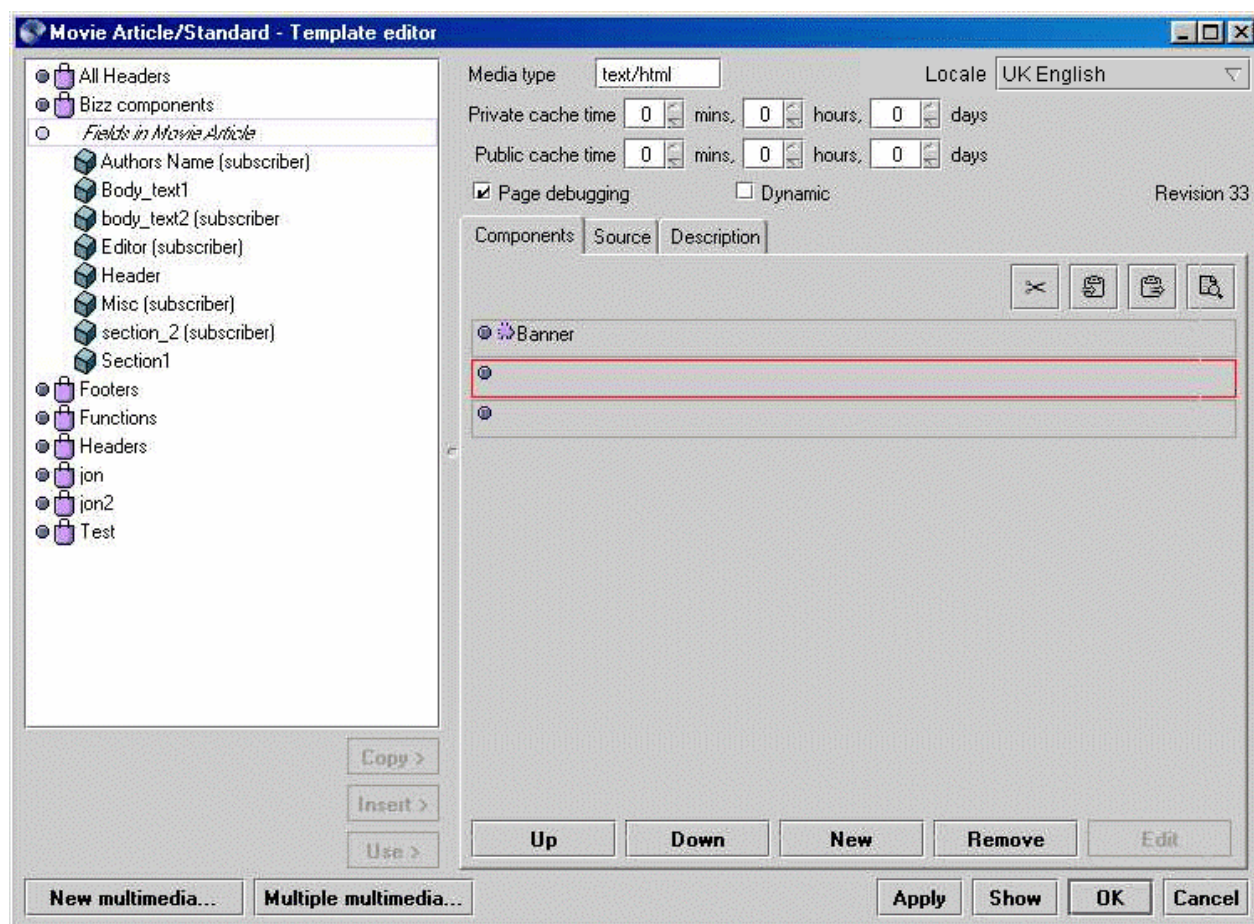
Figure 82. Morello template editor

The left pane contains a list of all the global and site categories. Categories that contain components can be expanded to display those components. You can copy components from the left pane into the right pane. For the item type associated with the template, the fields are listed.

Copy >	If a component is selected in the left pane, you can copy that component into the template that you are working with in the right pane. If the original component is later changed, there is no effect on the copied component.
Insert>	You can insert the text of a component into an element in the right pane (the element must be open.) The text loses any relationship to the parent component.
Use>	If a component is selected in the left pane, you can use it in the template in the right pane. If the original component is later changed, all occurrences of that component that exist in any other component or template are changed to reflect the change to the original.
	You may want standard text to appear on every page of the site. For example, a banner, or legal information. You can create that text once as a component, and use it in templates.

Left pane description

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The right pane contains the facilities for creating and editing elements of the components.

Media type	The media type of pages rendered with this template, usually `text/html`.
Locale	The locale of this template. This will be used to set the character set and language of pages rendered with this template.
Private cache time	The period of time that pages rendered with this template will be cached within a browser. The default setting is one day.
Public cache time	The period of time that pages rendered with this template will be cached within a proxy server. The default setting is one day.
Page debugging	When enabled, page debugging helps you to find errors in the template.
Dynamic	When checked, specifies that when an item expires in the cache it should always be refreshed from the content server. Otherwise, the item is refreshed only if it has been updated.
Revision	Displays the number of times the template has changed.
Components	Tab that allows you to work with components and other elements in your template.
Source	Tab that allows you to view the source code of the template that you are working with. You cannot edit source code in this window.
Description	Tab that allows you to enter a description of the template (maximum 512 characters, including spaces). You can include information about what the template does, or how to use it.
	Cuts (removes) a piece of text.
	Copies a piece of text.
	Pastes text that was previously cut or copied.
	Allows you to search your desktop or network for items to insert.
Up	Allows you to move the selected element upwards in the sequence.
Down	Allows you to move the selected element downwards in the sequence.
New	Adds a new element. You must click the element to open it.
Remove	To remove an element, select the element and click **Remove**.
Edit	To edit an element, select the element and click **Edit**.

Right pane description

The lower pane contains buttons relating to multimedia, and a button that allows you to preview your component in a browser.

New multimedia button	Opens a new item window, where only media item types can be created. Refer to "Adding multiple multimedia items", page 87
Multiple Multimedia	Opens the **Upload multimedia items** window, which allows you to upload a directory of multimedia items.
Apply	Allows you to apply the changes to the new component without closing the component editor window.
Show	Allows you to view your template in a browser. You are asked to select a browser.

Lower pane description

7.8   Working with the Components tab

To create a new element in a template:

1.   In the template editor (Figure 82, page 93), select the **Components** tab.

2.   Click **New**.

A blank element appears.

3.   Type in a server function, or a piece of HTML code.

To copy, or use an existing component in a template:

1.   In the template editor (Figure 82, page 93), select the component in the left pane.

2.   Click **Copy> or Use>**

The component appears in the right panel.

You cannot edit a used component.

3.   To edit a copied component, select the component and click Edit.

The **Component editor** window appears ("Working with components", page 84).

To insert text from an existing component into a template element:

1.   In the template editor (Figure 82, page 93), select the component in the left pane.

2.   Open the required element by clicking the small icon at the left of the element.

3.   Click Insert>

The text is inserted in the element.

4.   Edit the text, using the editing icons if required.

To use page debugging:

1.   In the template editor (Figure 82, page 93), set **Page debugging** on.

2.   Select the **Source** tab.

The debugging entry is at the end of the code.

To change the sequence of template elements:

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1.   In the template editor (Figure 82, page 93), select the element whose sequence you want to change.

2.   Click **Up** or **Down** as often as necessary.

	Cuts (removes) a piece of text
	Copies a piece of text.
	Pastes text that was previously cut or copied.
	Allows you to search your desktop or network for items to insert.
Up	Allows you to move an element nearer the top of the panel.
Down	Allows you to move an element nearer the foot of the panel.
New	To add an element, click **New**.
Remove	To remove an element, select an element and click **Remove**.
Edit	To edit an element, select an element click **Edit**.

Description of the Components tab

8   Creating items

8.1   Displaying items

Items that you create on a site are listed in the main Morello window.

The appearance of the main window depends on your access privileges. The upper part of Figure 83 shows the main window for a user who can access all sites, and who can create item types, groups, users, templates, and so on.

The lower part of Figure 83 shows the main window for a user who can only access one site. You can see that the menu bar in the lower part has less options.
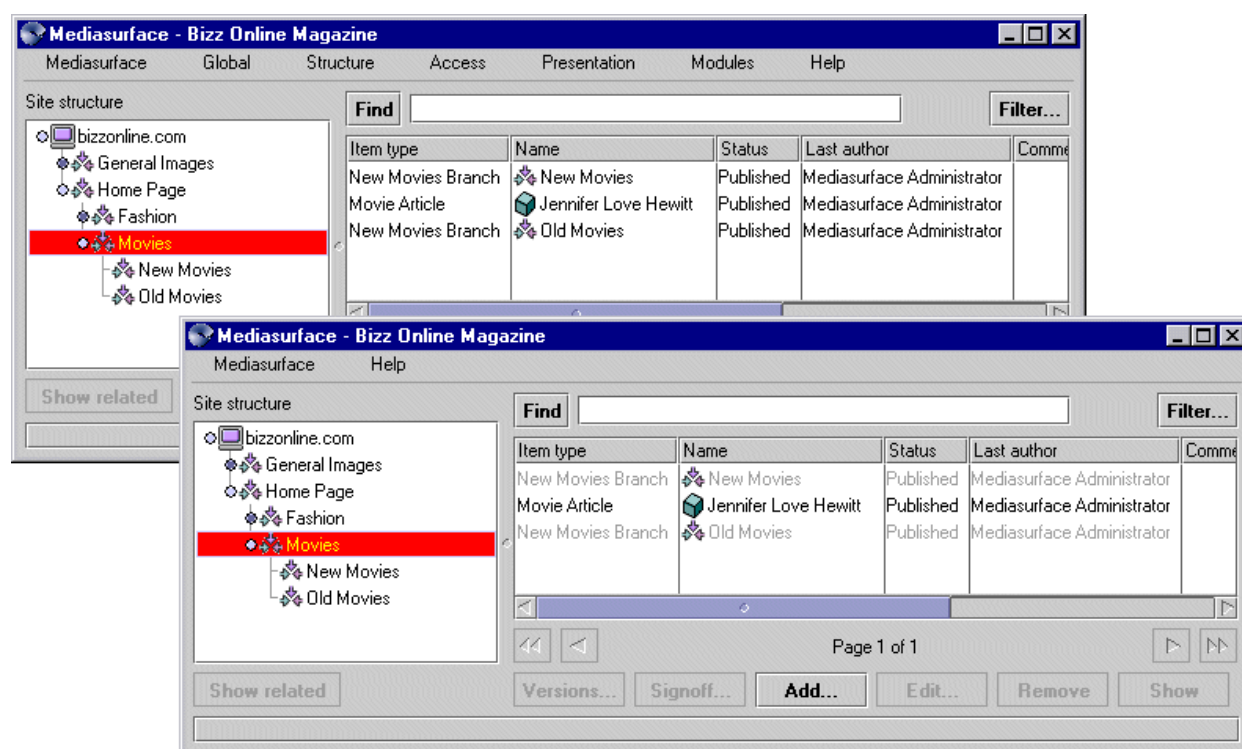
Figure 83. Morello main window for different access rights

The left pane shows the branch items that form the site structure. The right pane shows the branch and leaf items attached to the branch that is selected in the left pane.

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This method of showing leaves and branches is similar to the method used in Windows Explorer, where only directories are shown in the left pane, and both directories and files are shown in the right pane.

Find	Finds items containing a specified string in either the **Name**, **Path**, or **Comment** columns. The target column for the search is specified using the **Filter** button (see next entry), and defaults to the **Name** column.
	Type a text string, and click **Find**. For example, in Figure 83, if you type **move** and click **Find**, **New Movies** and **Old Movies** are displayed.
	Each search is a new search, based on all items. For example, if you now type **Jenn** and click **Find**, the **Jennifer Love Hewitt** article is displayed.
	To redisplay all items, delete the string from the **Find** box, and click **Find**.
	If you leave the search string in the **Find** box, and click on other branches in the site structure, only those items containing the search string are displayed.
Filter	Displays the **Item filter** window, which allows you to:
	▪ Specify the columns to be displayed in the right pane.
	▪ Specify whether the search is to be done on the **Name**, **Path**, or **Comment** column.
	▪ Restrict the search to one item type, one status, and one author.
	For a description of the **Item filter** window, refer to Figure 85, page 101.
Item type	The type of the item. For information about item types, refer to "Setting up item types", page 60.
Name	The name of the item.
Status	The current publishing status for the item. For information on publishing statuses, refer to "Working with publishing statuses", page 34, and "Working with the publishing flow for an item type", page 75.
Last author	The name of the person who created the item, or who last edited the item, or who last signed off the item to this current stage.
Comment	Helpful text about the item.
URL	The location of the item in the site structure.
(Arrow buttons, described in next four rows)	The items pane has no vertical scroll bar. Instead, arrows are used to move up and down the list. Only highlighted buttons have any effect: for example if you are already at the top of the list, buttons which allow you to move upwards in the list are not highlighted). A blue square (if any) indicates the last button pressed.
	Move to the top of the list.
	Move one page up the list.
	Move one page down the list.
	Move to the foot of the list.
Show related	If you select an item in the right pane, and click **Show related**, Morello displays a list of items that are related to the selected item. Simultaneously, the **Show related** button changes to a **Site structure** button, and a **Relate to** button appears to the right of the **Site**

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structure button. The descriptions of the **Site structure** and **Relate to** buttons are shown below.

Site structure	This button is only displayed if you previously clicked the **Show related** button. If you now click **Site structure**, the window reverts to the normal site structure view.
Relate to	Allows you to relate items in the right pane to the parent item. For example, Figure 84 on page 100 shows that **Jennifer Lopez Walks for Gucchi** has been related to Jennifer Love Hewitt.

1. Select the required items and click **Relate to**.

A pop-up menu appears, containing **One way relation** and **Two way relation**. A one-way relation means that a link in the parent page points to the child. A two-way relation means that links in the parent and child pages point to each other.

2. Select the required option.

The related items are displayed in bold font.

Parent pages must have the function str_relations() inserted in the template. Child pages must have str_parentrelations() inserted in the template. Refer to the *Template Programming Guide* for information on all functions that can be included in templates.

Versions	If you select an item in the right pane and click **Versions**, Morello displays the **Versions** window, which shows the version history for the selected item (see Figure 86).
Signoff	Sign off a selected item to the next stage of the publishing flow (refer to "Working with publishing statuses", page 34, and "Working with the publishing flow for an item type", page 75). If you select an item in the right pane and click **Signoff**, Morello displays the **Signoff** window, which allows you to add some notes relating to the signoff (see Figure 86, page 102).
Add	Allows you to create an item. The **Item properties** window appears (refer to Figure 88, page 104).
Edit	Allows you to edit the details for a selected item. The **Item properties** window appears (refer to Figure 88, page 104).
Remove	Removes a selected item from the site. You are asked to confirm the deletion.
Show	Shows a preview of a selected item in a browser. The **Show Options** window appears, allowing you to select which view to display, and which browser to use (refer to Figure 94, page 108).

Description of the Morello main window

Figure 84. Use of the Show related button and the Site structure button

8.2 Finding items in the main window

If you have a large number of items in the main window, it may be difficult to find those items that you want to work with. Use the **Filter** and **Find** buttons to help you to narrow the search.

To find items in the main window:

1. Click **Filter**.

    The **Item filter** window appears (refer to "Specifying options to use in finding items", next section).

2. n the **Show** pane, select the features that you want to appear, such as column headings.

3. In the **Find on** pane, select which column the text search should be restricted to.

4. In the **Condition** pane, specify whether you want to search on all values of the options, or on specified values.

5. Click **OK** to close the **Item filter** window.

6. In the **Find** box in the main window, enter the text string that you want to find.

7. Click **Find**.

8.3 Specifying options to use in finding items

In the **Item filter** window, you can:

▪ Specify the columns to be displayed in the right pane.

▪ Specify whether the search is on the **Name**, **Path**, or **Comment** column.

▪ Allow a search on all item types, statuses, and authors; or on specified values for these.

To specify options to use in finding items:

▪ In the Morello main window, click **Filter**.

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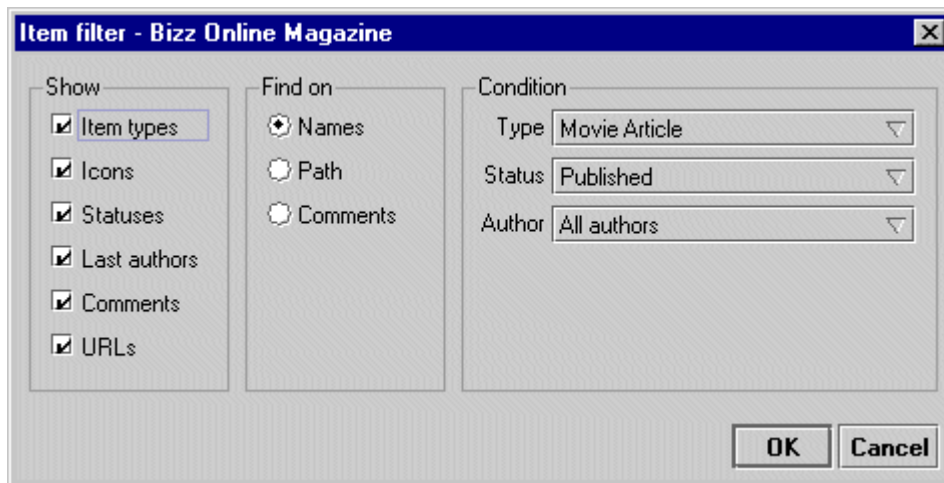
Figure 85. Specifying options to use in finding items

If any of these check boxes are selected, with the exception of **Icons**, the corresponding selection appears as a column header in the right pane of the Morello main window (Figure 83, page 97).

If the **Icons** check box is selected, an icon appears at the left of each item name in the right pane of the Morello main window (Figure 83, page 97).

The default is that all features are displayed.

Description of the Find On pane:

If an option is selected, Morello searches within that column for any text string that you type in the **Find** box in the main window. For example, if you select **Path**, Morello searches only in the **URL** column. The default is **Names**.

Description of the Condition pane:

For each of **Type**, **Status**, and **Author**, you can choose to search on all values or on specified values.

The default is that you can search on all values of **Type**, **Status**, and **Author**.

8.4   Displaying the version history for an item

You can display all previous version history for an item.

To display version history for an item:

1.   In the Morello main window, select an item.
2.   Click Versions.

     The **Versions** window appears.

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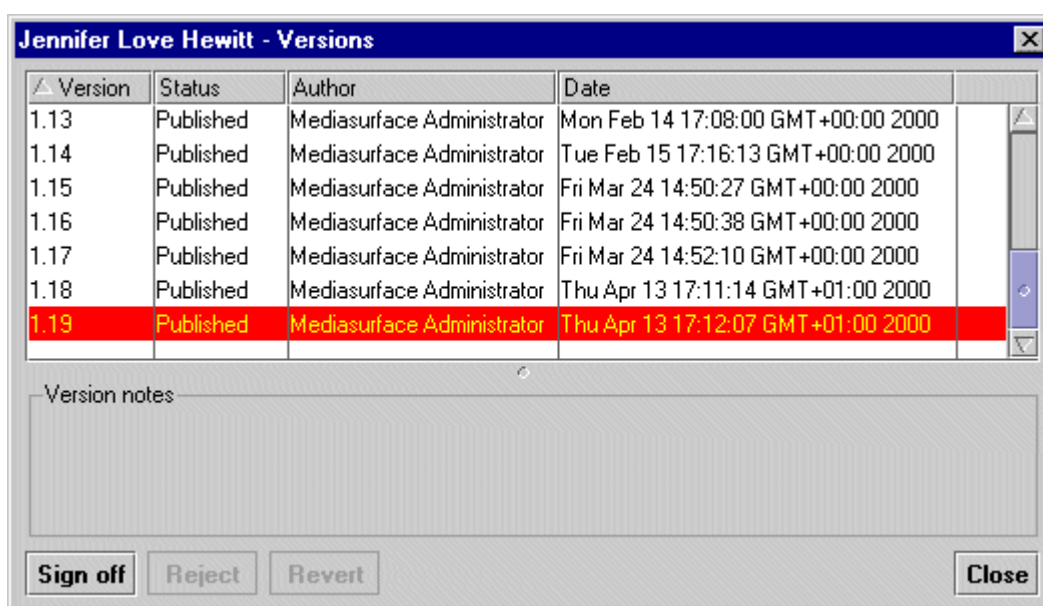
Figure 86. Displaying the version history for an item selected in the Morello main window

Version	Version number.
Status	Publishing status.
Author	The name of the person who created the item, or who last edited the item, or who last signed off the item to this current stage.
Date	Date on which the item moved to the associated version number.
Version notes	Notes entered by someone who clicked **Signoff** in the **Versions** window, or by someone who clicked **Signoff** in the main window. There is no scroll bar, so you may need to expand the window to see all the notes.
Sign off	Allows you to sign off a highlighted item to the next stage of the publishing flow. The last version of the item is highlighted by default, because only the last version can be signed off.
Reject	Allows you to return to a previous status. The status that you return to is specified during creation of the item type. Refer to the **Reject status** drop-down menu in the **Item type status properties** window (Figure 66, page 75).
Revert	Allows you to highlight a previous publishing status, and revert to that status. All versions of the item that follow the status that you revert to are permanently removed from the database. In order to revert to a status, that status must have been set up during the creation of the item type. Refer to the **Sign off a new version to the next status** check box in the **Item type status properties** window (Figure 66, page 75). To find out whether you can revert to a specific status, highlight the status. If the **Revert** button is activated, you can revert to that status.

Description of the Versions window

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8.5   Signing off items to the next publishing flow status

Depending on your privileges, you can sign off an item to the next stage in the publishing flow. For information on publishing statuses, refer to "Working with publishing statuses", page 34, and "Working with the publishing flow for an item type", page 75.

To sign off an item to the next publishing status:

1.   In the Morello main window, select an item.

2.   Click **Signoff**.

      The **Signoff** window appears.

3.   Enter any notes related to the signoff, and click **OK**.

      You are limited to 512 characters in the notes. Any extra characters are truncated when displayed in Figure 86 on page 102, or Figure 103 on page 118.
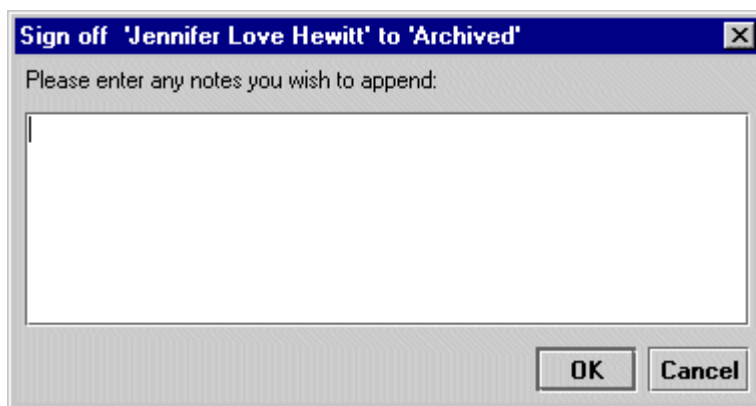
Figure 87. The signoff window allows you to add some notes relating to the item being signed off

8.6   Adding and editing items

You can add new items and edit details for existing items.

To add an item:

▪   In the Morello main window, click **Add**. The **Item properties** window appears.

To edit the details for an existing item:

1.   In the Morello main window, select the item to be edited.

2.   Click **Edit**

      The **Item properties** window appears.

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Figure 88. Adding or editing items

Name	Name of the item.
Type	Drop-down list containing all the item types that you can access. Select an item type on which to base a new item. If you are editing an item, this drop-down list is deactivated.
Detail	Allows you to specify a short name and a collection for the item. Refer to "Specifying item details", page 108.
Fields	Allows you to type the text for a specified field. Refer to "Adding or editing text in item fields", page 109.
Composite items	Allows you to specify the multimedia items that will be associated with your item. Refer to "Specifying multimedia items for your item", page 111.
Attach points	Allows you to specify where your item will be attached to the site structure. Refer to "Specifying attach points for your item", page 112.
Indexes	Allows you to define indexes for item. These allow users to search your site. Refer to "Specifying indexes for your leaf item", page 114.
Branch indexes	Allows you to define branch indexes for item. Refer to "Specifying branch indexes for your item", page 115.
Version history	Allows you to enter a comment about the version of the item. Refer to "Adding a new version note", page 118.

Description of the Item properties window

8.7   Deleting items

You can delete items from the Morello main window if you have access to those items. You can delete an entire branch, including all its child branches and items. You can alter your site structure by deleting a selected branch and simultaneously attaching its child branches and items to one of the remaining branches.

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Deleted items are moved to the bin. Refer to "Displaying the contents of the bin" on page 23.

8.7.1   Selecting items for deletion

You select items for deletion in the right pane of the Morello main window, then click **Remove**. You can select one or more *leaf items* for deletion at one time, but *branch items* must be deleted individually. If you select a branch item for deletion, then as soon as you select another item (leaf or branch), the **Remove** button is disabled.

Figure 89 shows that the **Remove** button is enabled when only leaf items are selected; Figure 90 shows that the **Remove** button is disabled when one branch item plus any other item (in this case, another branch item) is selected.

Note that the easiest way to delete *all* the items in the **Movies** branch is to move up one level in the site structure. Do this by selecting the parent of **Movies**, which is **Home Page**, in the left pane. Then you can select **Movies** in the right pane and click **Remove**.
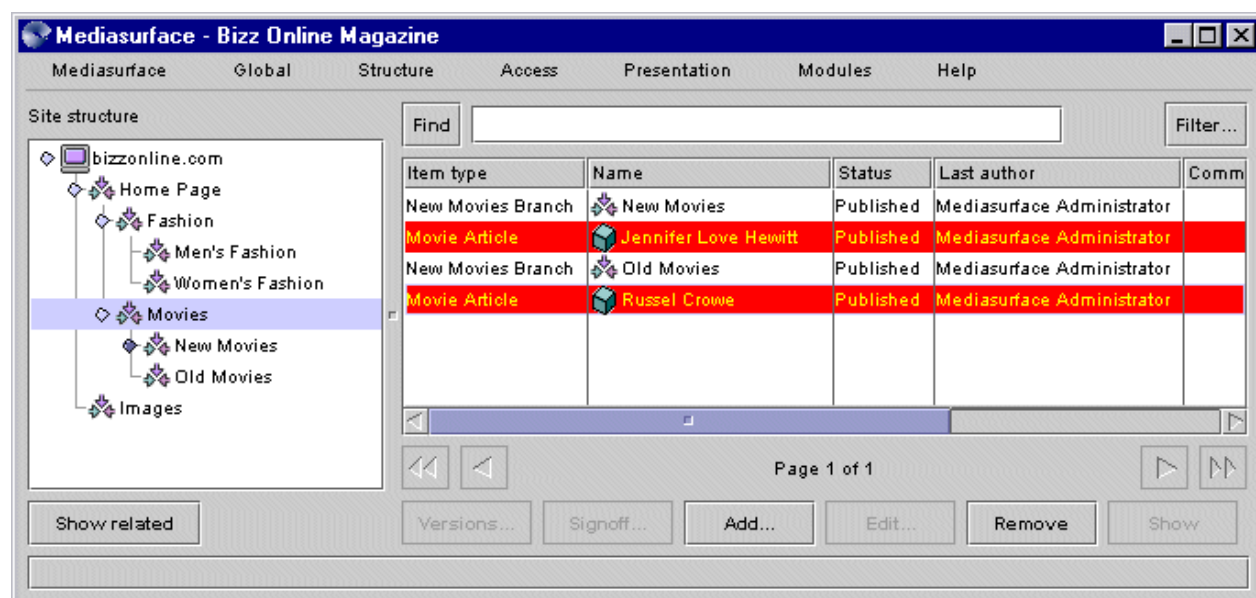
Figure 89. Deleting one or more leaf items

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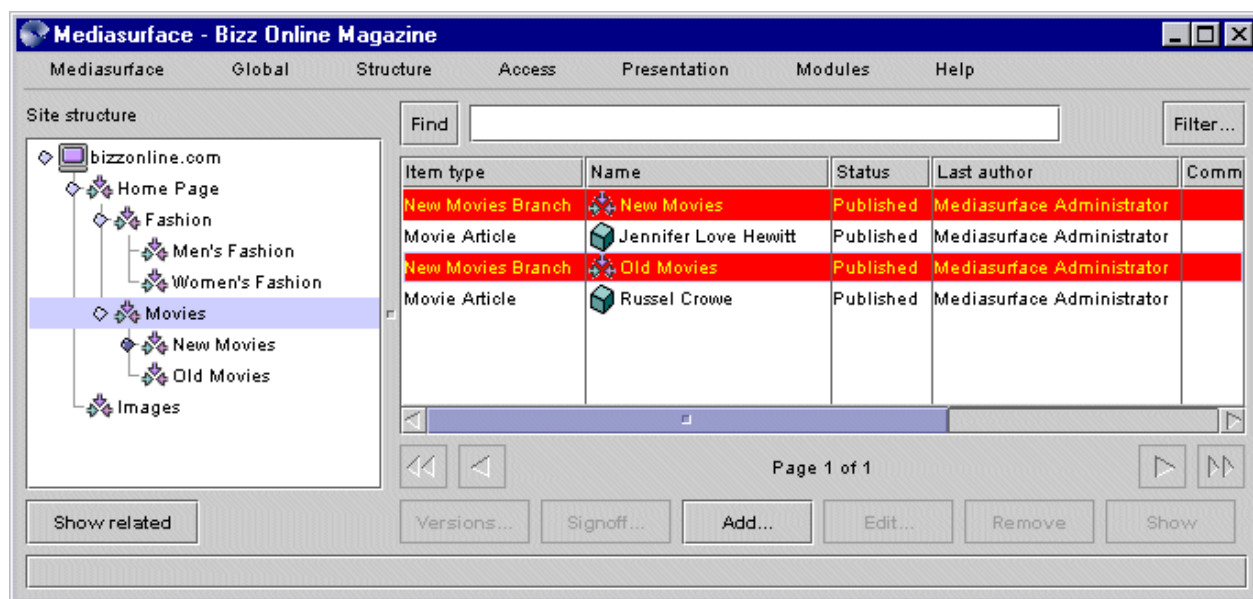
Figure 90. Deleting one branch item plus any other item

8.7.2   Deleting leaf items

If you select one or more leaf items for deletion and click **Remove**, the **Ask for delete confirmation** dialog box appears (Figure 91 below). You can cancel, or continue with the delete operation.
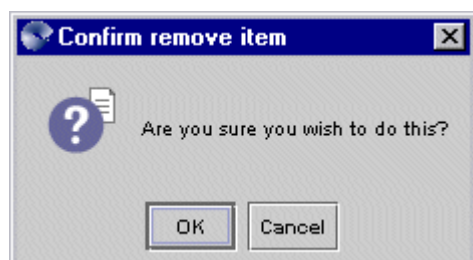
Figure 91. Deleting leaf items

8.7.3   Deleting a branch item

If you select a branch item for deletion, the **Delete** options dialog box appears (Figure 92 below). The options are described below.
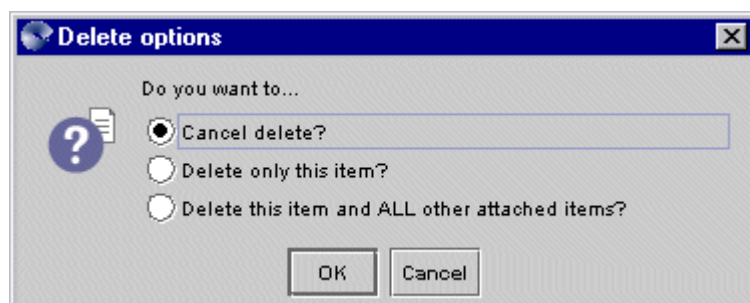
Figure 92. Deleting one branch item

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Cancel delete?	Cancels deletion of the items.
Delete only this item?	Deletes the item and allows you to choose where the children of that item will be attached. The **Select attach point** window opens (Figure 93 below). Select the branch to which the orphaned items must be attached.
Delete this item and ALL other items?	Deletes the item and all the other items that are recursively attached to the deleted item.

Description of the Delete options dialog
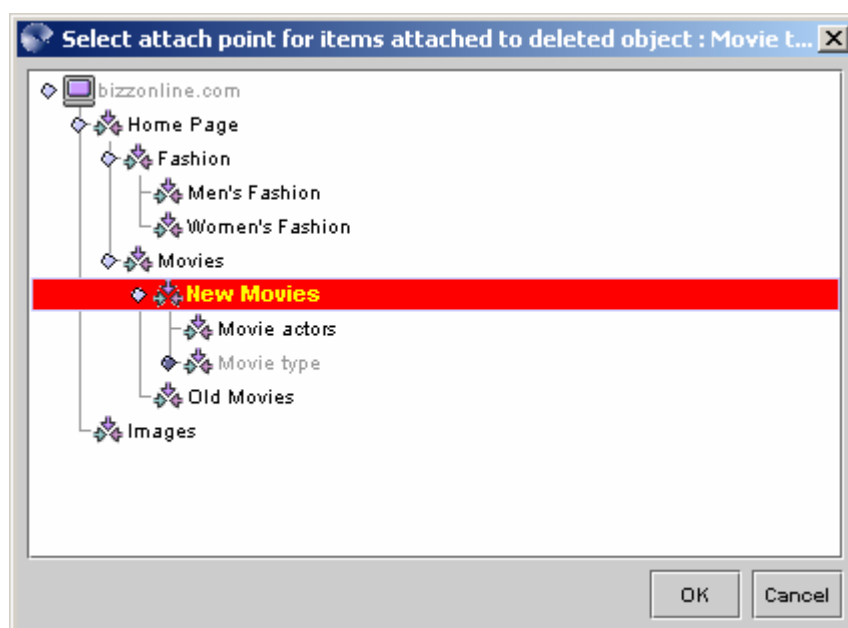
Figure 93. Selecting the new attach point for orphaned items

8.8   Previewing an item in a browser

You can view a selected item, with its selected view, in a specified browser.

To preview an item:

1.   In the Morello main window, select the item to be edited.

2.   Click **Show**

The **Show options** window appears.

3.   Select a view and a browser and click OK.

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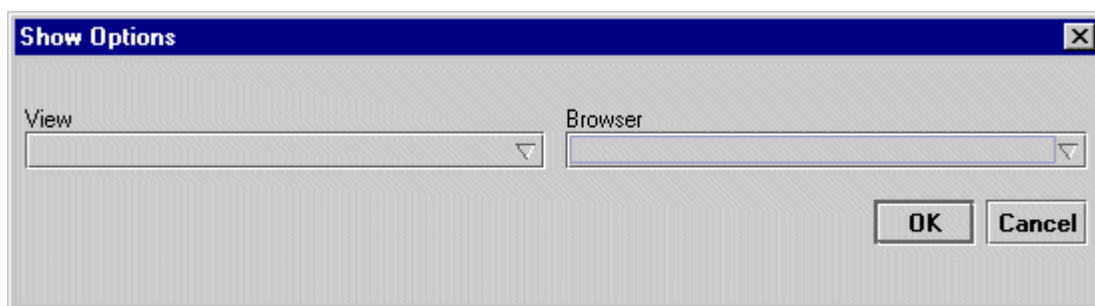
Figure 94. Selecting the view and browser in which to show an item

8.9   Specifying item details

You can specify a short name for the item, the collection of which the item is to be a member, and whether the item will have threaded discussions.

To specify item details:

1.   In the **Item properties** window, click the **Detail** tab.

2.   Specify item details.

3.   To close the **Item properties** window, click **OK**.

       or

       Click a different tab.

Figure 95. The Detail tab

Collection	Specifies which collection the item is to be a member of.
Locale	The locale of this item.
Short name	This is the name in the URL when the item is viewed in a browser. If you leave this blank, Morello generates a unique numeric value.
	Do not use any of the following ten characters in the short name. (Each character is separated by spaces and the list includes a comma.):
	; / ? : @ & = + $,
Comment	Comment relating to the item. This comment will appear in the **Comment** column in the Morello main window.
Multimedia file	This entire line is only visible if you are creating a composite item. Enter a file path and name of the multimedia file that you want to import, or use the browse function to find the multimedia file.
Move the status from ... to its next status on	This entire line is only visible if the Item type status properties window (Figure 66, page 75) has been set up as follows: **Sign off timing** set to **automatically** and **at specified time**.
	Automatically moves the item to its next status on the date and time specified.
Allow threaded discussions	This box is not activated if you are creating a composite item. When this option is checked, replies to a message or article are nested immediately after the message or article, rather than being arranged in chronological or any other sequence.

Description of the Detail tab

8.10 Adding or editing text in item fields

Each item has text fields that were specified during creation of the item type (refer to "Working with fields for item types", page 69). You can enter text into each of these fields, or edit existing text.

To add or edit field text:

1. In the **Item properties** window, click the **Fields** tab.
2. Select a field in the left pane.

   Any existing text for the field appears in the right pane.

3. Add or edit the text.
4. Repeat for other fields if required.
5. To close the **Item properties** window, click **OK**.

   or

   Click a different tab.

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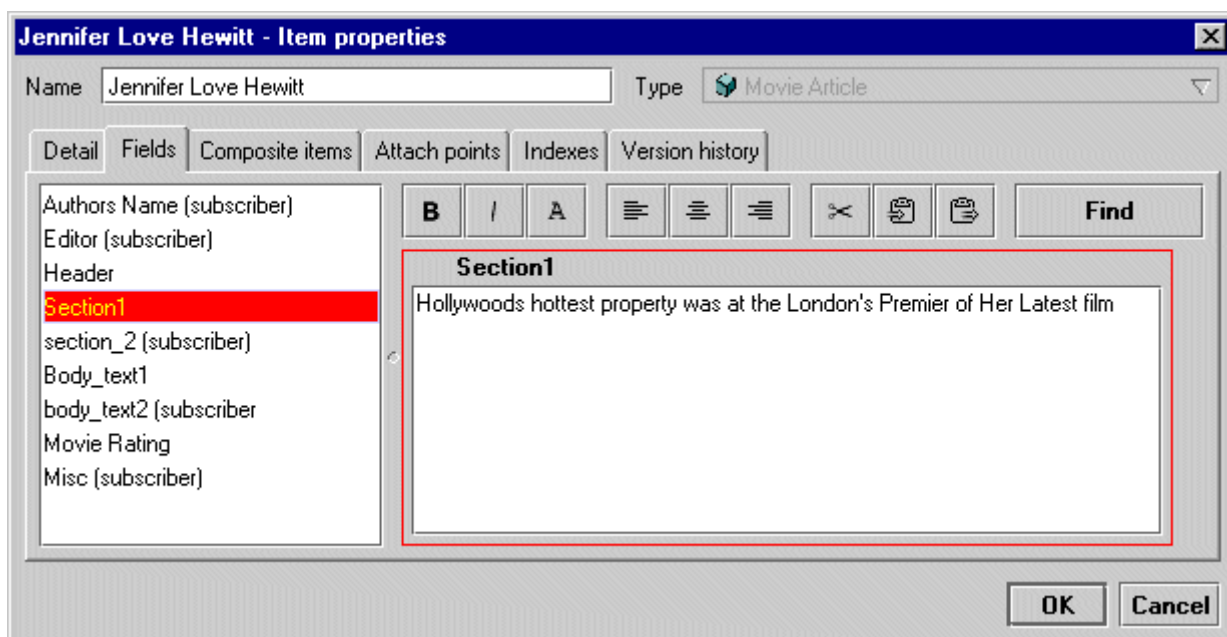
Figure 96. The Fields tab

The left pane contains a list of all the fields for that item type.

The right pane contains any text for the field selected in the left pane. You can apply formatting, either by using the icons or by inserting your own HTML tags.

B	Allows you to format selected text as bold. The tags \ and \ are inserted before and after the selected text.
I	Allows you to format selected text as italics. The tags \<i> and \</i> are inserted before and after the selected text.
A	Formats selected text as fixed-width font. The tags \<tt> and \</tt> are inserted before and after the selected text.
≡	Left-justifies text. Place your cursor at the beginning of the text, and click the icon. The tag \<p align=left> is inserted.
≡	Centres text. Place your cursor at the beginning of the text, and click the icon. The tag \<p align=center> is inserted.
≡	Right-justifies text. Place your cursor at the beginning of the text, and click the icon. The tag \<p align=right> is inserted.
✂	Cut selected text and places it on the clipboard.
📋	Copies selected text to the clipboard.
📋	Pastes the current contents of the clipboard at the cursor location.
Find	Finds a specified text string.

Description of the Fields tab

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8.11   Specifying multimedia items for your item

Each item has text fields that were specified during creation of the item type (refer to "Working with fields for item types", page 69). You can enter text into each of these fields, or edit existing text.

To add or edit field text:

1. In the **Item properties** window, click the **Composite items** tab.
2. Specify the required information.
3. To close the **Item properties** window, click **OK**.

   or

   Click a different tab.
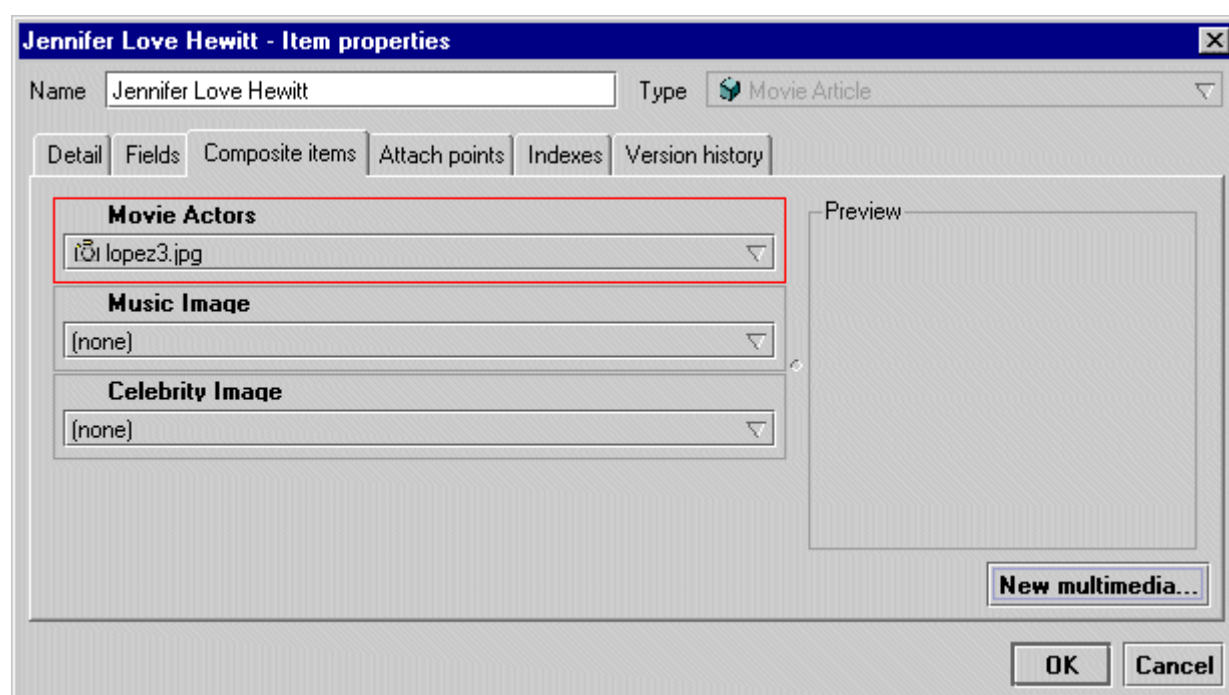
Figure 97. Adding multimedia

The left pane contains the composite item types that you are allowed to insert in your item. These item types were specified by the creator of the item type (refer to "Assigning composite item types to new item types", page 71). Each composite type has a drop-down menu that contains all the composite items of that type.

The right pane previews the composite item that you select in the left pane.

New multimedia	Allows you to import multimedia items (refer to "Importing multimedia items", next section)

Description of the Composite items tab

8.12   Importing multimedia items

When adding or editing items, you can import multimedia items from external files.

To import multimedia items:

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1. In the Composite items tab, click New multimedia.

2. The **Item properties** window opens.

   This version of the **Item properties** window is for composite items only.

3. Specify the required information.

4. Click **OK**.
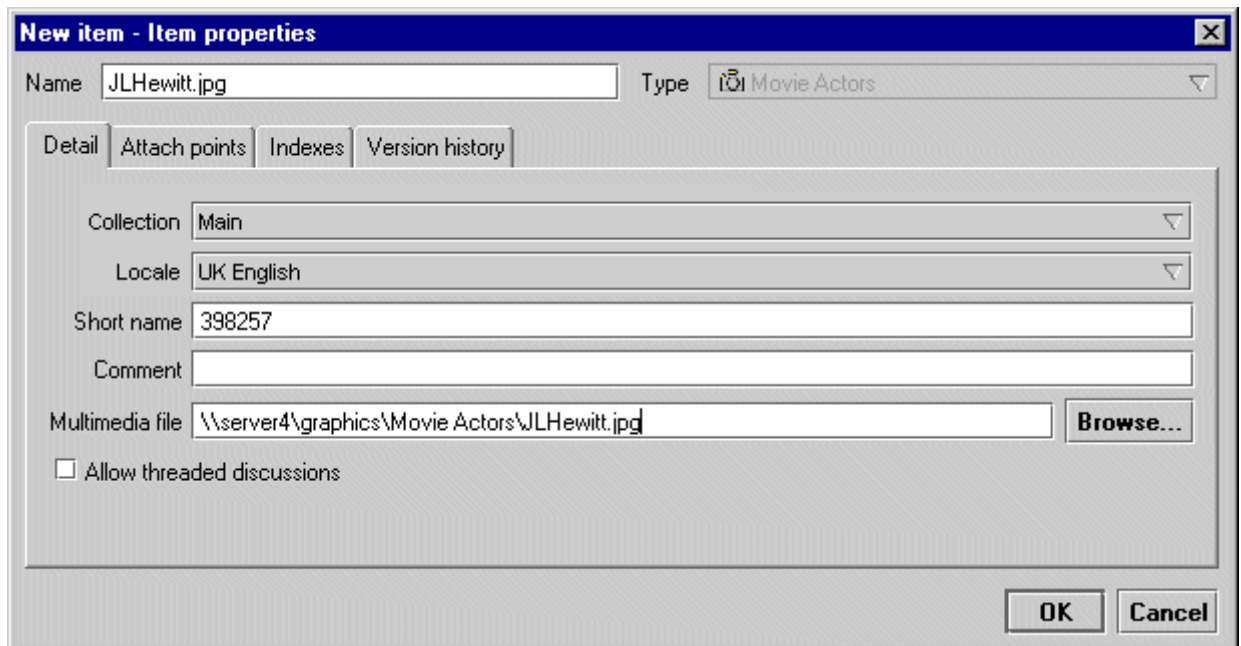
Figure 98. New multimedia

Description of the Item properties window for multimedia items:

The **Item properties** window for multimedia items has only four tabs. Otherwise, the window is similar to the **Item properties** windows for other items (refer to Figure 95, page 108).

8.13 Specifying attach points for your item

You can specify where your item will be attached to the site structure. Attaching an item to a branch item allows a link to be created from the web page based on the branch item to the web page based on the current item. You can specify several branch points, as long as one of these is specified as the *primary* attach point.

The primary attach point is important for the following reasons:

All other attach points for the current item have the same URL as the primary attach point when the page based on that item is displayed in a browser.

All other attach points for the current item inherit all the indexes of the *primary* branch rather than the actual branch. For information on indexes refer to "Specifying indexes for your leaf item", page 114, and "Specifying branch indexes for your item", page 115.

You must create a home page using a branch item and attach it as root. If you do not create a home page and attach it as root your site will not be visible.

To specify attach points for a home page:

1. Select the public hostname, which is situated at the top of your site structure, as an attach point for your home page. In Figure 100, the public hostname is **bizz.dev.mediasurface.com**.

    A pop-up menu appears immediately above the **Name** column. There are two options:

Do NOT set as root	Does not set the item as root.
Set as root	Sets the item as the root. All the URLs in the site are recursively reset.

2. Select **Set as root**.

    The **Confirm ROOT reset** dialog box (Figure 99) appears.

3. Click **OK**.

    The resetting of the root item starts once you select **OK** in the **Item properties** window (Figure 88, page 104).

4. In the **Item properties** window, click **OK**.

    or

    Click a different tab.

    The resetting of the root item can take some time, depending on the size of your site. An hour glass appears until the resetting of the root is complete.
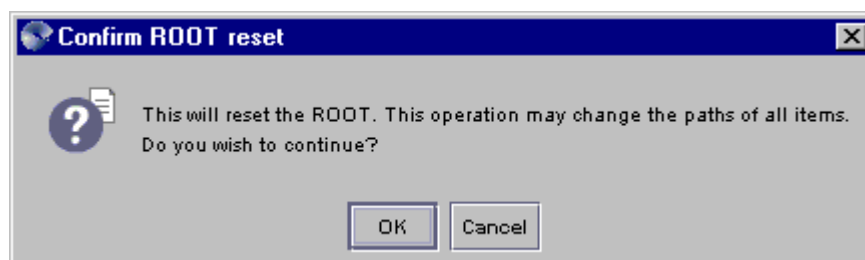
Figure 99. Confirm ROOT reset

To specify attach points for items other than the home page:

1. In the **Item properties** window (Figure 88, page 104), click the **Attach points** tab.
2. Specify the required information. To specify an attach point, click a branch in the structure.

    Do not set any branch items as root. Only your home page should be set to root.

3. To close the **Item properties** window, click **OK**.

    or

    Click a different tab.

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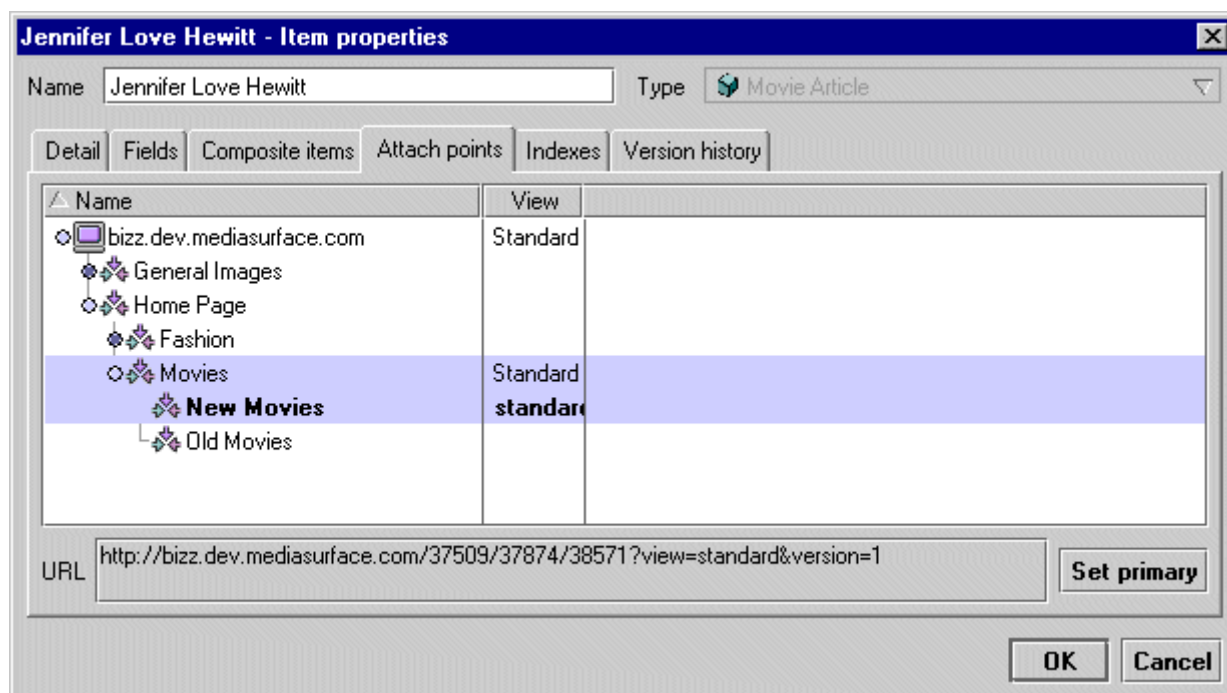
Figure 100. Attaching items

The left pane contains the site structure (this could be empty if no branch items have yet been created).

Name	The name of the branch item.
View	The view that will be displayed for the corresponding branch.
URL	The URL of the primary attach point. Items attached to other points will have the URL of the primary attach point.
Set primary	If you have more than one attach point, you *must* specify one of these points as the primary attach point. All other attach points for the current item will have the same URL as the primary attach point, and inherit the indexes from the primary branch.

Description of the Attach points tab

8.14   Specifying indexes for your leaf item

You can use indexes for searching or categorizing your content.
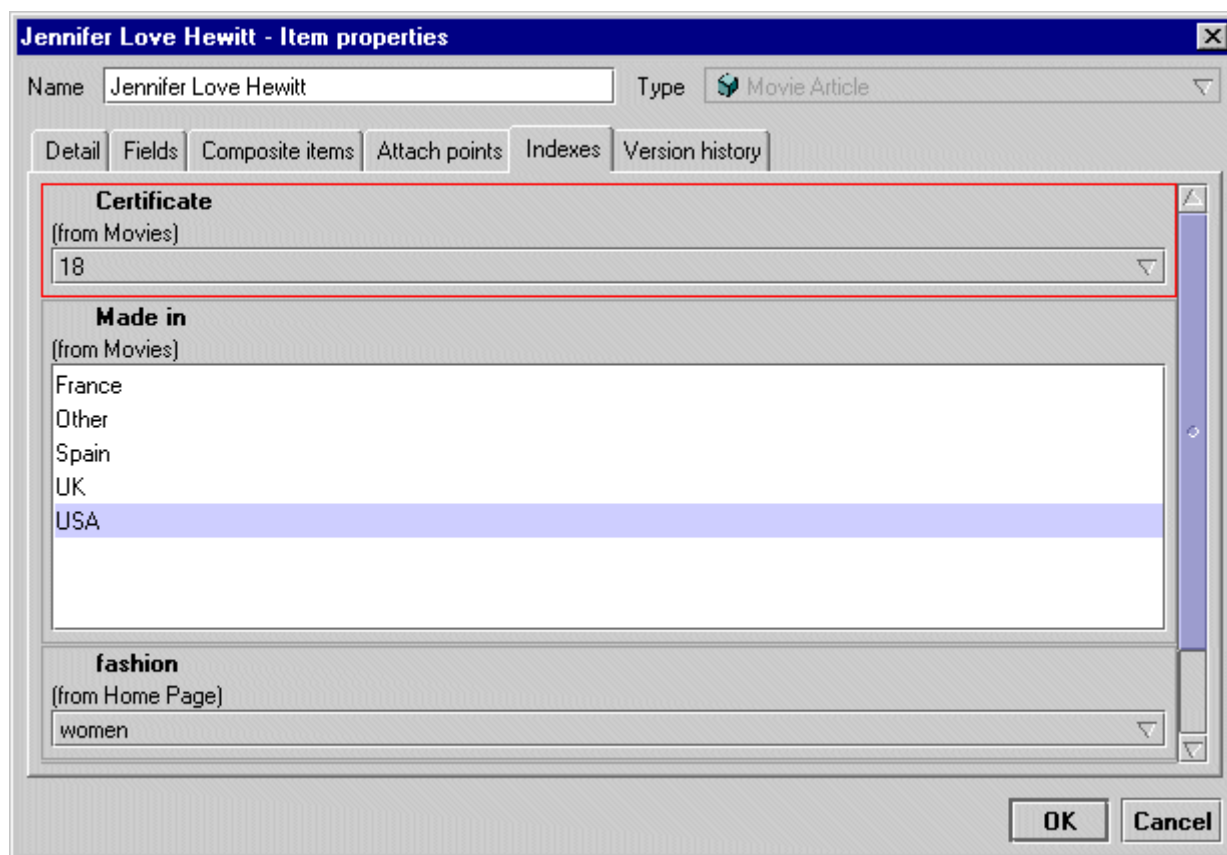
Items inherit the indexes for the branches that they are attached to. Indexes are set for each branch of the tree. Other branches or leaves that are attached to that branch inherit its index.

To specify indexes:

1.   In the **Item properties** window (Figure 88, page 104), click the **Indexes** tab.

2.   For each index item, specify the value for your current item.

3.   To close the **Item properties** window, click **OK**.

     or

     Click a different tab.

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Figure 101. Indexes for a leaf item

The indexes panel shows any indexes inherited from the branch that the item is attached to. If your item is attached to several branches, only the indexes from the primary attach point are inherited.

In Figure 101, one index (**fashion**) is inherited from **Home Page**. Two indexes (**Certificate** and **Movies**) are inherited from the **Movies** branch.

For the current item, the value of **18** has been selected from the drop-down menu for **Certificate**.

The index, **Made in**, appears as a list rather than as a drop-down menu. This is because **Allow multiple values** has been selected for the branch index, **Made in** (refer to "Specifying branch indexes for your item", next section).

8.15   Specifying branch indexes for your item

You can use branch indexes to help people to search your site.

The following three tables show examples of indexes and their corresponding values. These indexes would allow a searcher to locate medium-priced Thai restaurants in Birmingham.

Location	Cost of Meal	Type of Food
Birmingham	Cheap	British
Edinburgh	Medium	Indian
London	Expensive	Italian
Manchester		Mexican
		Thai

Items inherit the indexes for the branches that they are attached to. Indexes are set for each branch of the tree. Other branches or leaves that are attached to that branch inherit its index.

To add an index:

1. In the **Item properties** window (Figure 88, page 104), click the **Branch indexes** tab.
2. Specify the name of the new index in the **Add index** field (Figure 102, page 117).

    For example, based on the previous table, you could type *Location*.
3. Click Add index.

    The index name is added to the list of indexes.

To edit an index name:

1. In the **Item properties** window, click the **Branch indexes** tab.
2. In the list of indexes, select the index to be edited. Click **Update index**.

    The selected index appears in the **Add index** field.
3. Edit the name of the index. Click **Update index** again.

    The edited name replaces the original name in the list of indexes.

To add an index value:

1. Ensure that the index for which you want to add a value is in the **Add index** field (refer to "To add an index" or "To edit an index name", earlier).
2. Enter a value for the index in the **Add value** field.

    For example, based on the previous table, you could type *Birmingham*.
3. Click Add value.

    The value appears in the list of values.
4. Repeat steps 2 and 3 for additional values.

To edit an index value:

1. Ensure that the index for which you want to edit values is in the **Add index** field (refer to "To add an index" or "To edit an index name", earlier).

    Any current values for the index are displayed in the list.

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2. To edit a value, select the value in the list and click **Update value**.

   The selected value appears in the **Add value** field.

3. Edit the value. Click **Add value**.

   The edited value appears in the list.

4. Repeat steps 2 and 3 to edit other values.
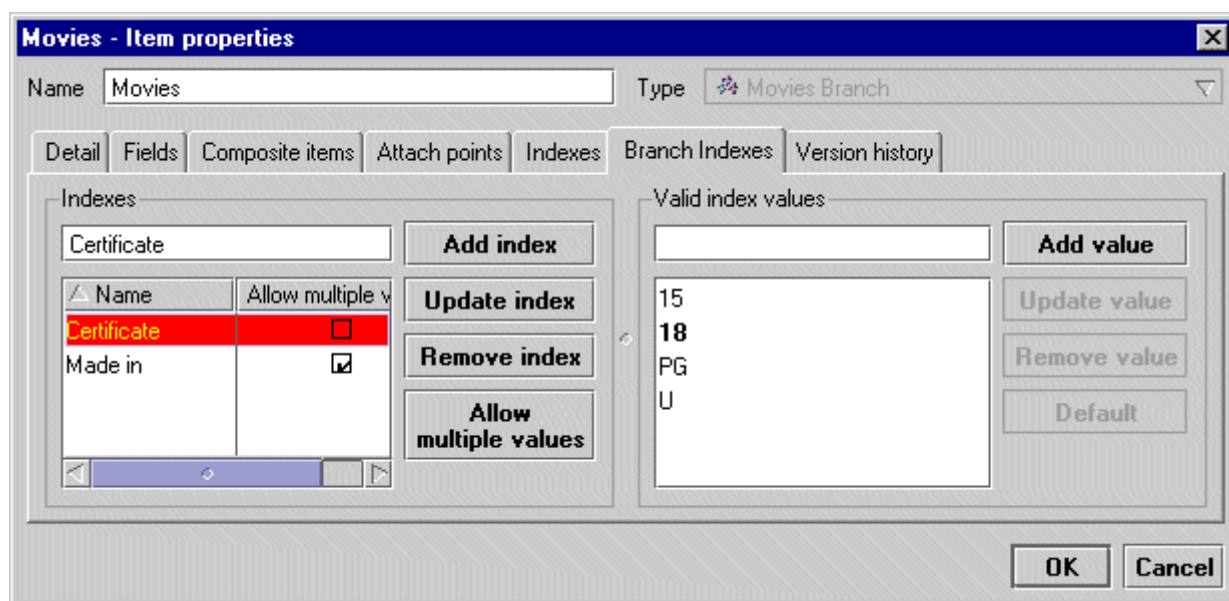
Figure 102. Branch indexes for branch items

Add index	To add an index to the index list, enter the name in the box, and click **Add index**.
Update index	To edit the name of an index, or the edit the values for an index, select the index in the list. The selected index appears in the **Add index** box, and the corresponding values appear in the values list (right pane). Edit the index. Click **Update index**. The updated index name appears in the list.
Remove index	Removes a selected index from the list. You are asked to confirm the removal. Click **OK** to confirm.
Allow multiple values	A toggle button that allows you to select either one value or multiple values from a list of index values.
	To specify either single or multiple values, select an index in the left pane. If the selection currently does not allow multiple values (the default), there is no tick in the **Allow multiple values** column, and the button caption is **Allow multiple values**. If you press the button, a tick appears in the **Allow multiple values** column for the selected index. Simultaneously, the button caption changes to **Allow single values**.
	If you press the button again, the tick is removed from the **Allow multiple values** column), and the button caption changes to **Allow multiple values**.
Add value	To add a value to the list of valid index values, type a value in the **Add value** box and click **Add value**.

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Update value	To edit a value, select the value in the list and type the new value in the **Add value** box. Click **Update value**. The edited value overwrites the original value in the list.
Remove value	Removes a selected value from the list. All items inherit indexes from the parent, so you are warned that removing a value causes all the children to lose this value. Click **OK** to confirm.
Default	To set a default, select the value and click **Default**. The selected value is shown in bold. You must nominate a default value.

Description of the Branch indexes tab

8.16   Adding a new version note

Each time you edit an item, you can enter a comment relating to the change. This allows you to maintain a complete audit trail for the item.

To add a new note:

1.   In the **Item properties** window (Figure 88, page 104), click the **Version history** tab.

2.   In the **New version note** field, enter a note.

3.   To close the **Item properties** window, click **OK**.

     or

     Click a different tab.
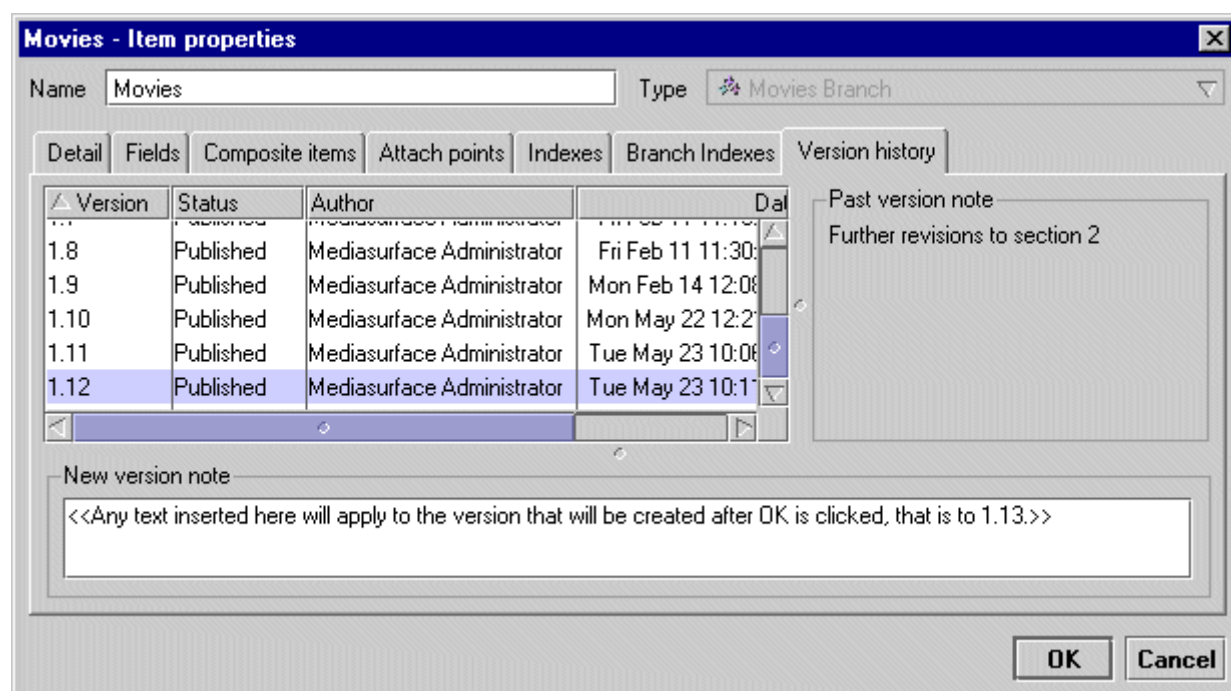
Figure 103. Comments for version history

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Version	Version number. Automatically incremented by the system each time that you make a change to the new item and then close the **Item properties** window.
Status	The publishing status for the item (refer to "Working with publishing statuses", page 34, and "Displaying the publishing flow for an item type", page 73").
Author	The person who created or edited the item.
Date	The date the item was created or edited.
Past version note	This note applies to the version that will become the past version after the item is edited. In Figure 103, the note applies to version 1.12. There is no scroll bar, so you may need to expand the window to see all the notes.
New version note	This note applies to the version that will become the current version after the item is edited. In Figure 103, the note applies to version 1.13. There is no scroll bar, so you may need to expand the window to see all the notes.

Description of the Version history tab

8.17   Relating items

There are three stages in relating items:

1.   The type of one of the items must have already been related to the type of the other item. Refer to "Specifying related types for item types" on page 80.

2.   The items must be related to each other using the **Relate to** button in the Morello main window. Refer to "Description of the Morello main window", on page 99.

3.   Insert the `str_relations()` function in the template for each parent view that you want to show the links. Insert the `str_parentrelations()` function in the template for each child view that you want to show the links. Refer to Figure 4 on page 5, Figure 5 on page 6, and Table 1 on page 11 for an example of `str_relations()`. Refer to "Description of the Morello main window", on page 99.

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9   Internationalisation

Morello provides support for content in multiple languages using the Unicode character set.

Further information on this support is provided in the *Template Programming Guide*.

9.1   Functionality

There are four main elements to this functionality.

- Support in the Perl Interaction Engine and Java Interaction Engine for UTF-8 encoded content.
- Ability to assign a locale to an item and to a template, enabling the geopolitical region where it is of use to be identified.
- Ability to search content in multiple languages.
- Ability to sort lists of items of content in multiple languages using appropriate sorting criteria.

9.2   Constraints

The following constraints are imposed for this functionality in this release:

- The use of Unicode characters is currently supported for field content only. Wider support is expected in a future release.
- The Rules Console does not support the editing of content whose fields contain Unicode characters. However, it will not damage such content if other properties of an item, such as its attach points, is changed. Full Unicode support will not be added to the Rules Console, whose functionality will be replaced in a future release.
- There is no support for native character sets, for example Japanese Shift-JIS or Traditional Chinese Big-5, or the translation between them and UTF-8.

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10   Creating components and templates using Dreamweaver

The Morello Dreamweaver integration module allows you to create templates or components using Macromedia Dreamweaver rather than the Morello editors. (The Dreamweaver module must be purchased and installed separately. The Morello Dreamweaver Integration only works with Dreamweaver versions 3 and 4, Dreamweaver Ultradev version 4 and Dreamweaver MX). You can quickly create pages in a WYSIWYG manner without having to know HTML. Most of the features of the Morello component and template editors are included.

The Dreamweaver module allows Dreamweaver to access Morello objects such as item types, components, templates, and so on. If you have previously used Dreamweaver, you will notice two things:

▪   There is additional functionality in some of the dropdown menus.

▪   A slightly different way of constructing templates is required to get the most from using Dreamweaver as an editor.

If you are planning to build a site, refer to "Getting the Most from Dreamweaver and the Design Module", page 147.

10.1   What are you allowed to do in Dreamweaver?

Whatever you are allowed to do in Morello, you can do in Dreamweaver, with two exceptions (deleting templates and editing or deleting views) described later. For example, if you are allowed to create components in Morello, then you can create components in Dreamweaver. For information on access rights, refer to "Granting administration access rights to a group", page 49, and "Granting administration access rights to a user", page 57.

Dreamweaver prevents you from using a command for which you do not have access rights, and displays an explanatory message.

In Dreamweaver, there is no functionality to do the following:

▪   Edit the name of a category.

▪   Delete a template.

10.2   Getting Help

Help is available for all Morello-related aspects of Dreamweaver. Simply click **Help** on the Dreamweaver menu bar.

10.3   Setting up Dreamweaver on the Content Rules Console

The Morello Dreamweaver Integration module must be installed using the Macromedia Extension Manager 1.2. or better Download the Extension Manager from the following site:

http://www.macromedia.com/exchange/dreamweaver/

Note: This download is not required for Dreamweaver 4 users. The Macromedia Extension Manager 1.2 comes preinstalled with Dreamweaver 4.

The new Macromedia Extension Manager 1.2 runs within Dreamweaver and lets you easily install new extensions and manage existing ones. The Morello Dreamweaver Integration is packaged as a Macromedia extension project file named `Mediasurface.mxp`.

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10.3.1 Installing the Dreamweaver Integration

1. Open Dreamweaver.

2. In the **Commands** dropdown menu, click **Manage Extensions**.

    Macromedia Extension Manager opens.

3. In **Macromedia Extension Manager** click **File** menu, then click **Install Extension.**

    A file selection dialog box is displayed.

4. Select the **Mediasurface.mxp** file, and click **Install**.

5. Follow the installation instructions that appear on the screen. If you are asked for confirmation to replace an existing file with the same name, select **Yes**.

When the installation is complete, a dialog is displayed to confirm its success. You must edit the Morello settings from within Dreamweaver.

10.4 Launching Dreamweaver

To launch Dreamweaver:

1. On the Windows task bar, click **Start**.

2. Click **Programs**.

3. Click the **Macromedia Dreamweaver** folder.

4. Click **Dreamweaver**.

    The Dreamweaver main window appears (Figure 105, page 123).

    Note that, for Dreamweaver MX, at least one site must be defined before Morello templates or components can be opened. To define a site, select "New Site…" under the Dreamweaver "Site" menu and follow the instructions in the resulting wizard.

10.5 Logging in to Morello from Dreamweaver

In order to access Morello objects such as components and templates, you must log in to Morello from Dreamweaver. The first Morello command (see Table 3, page 127) that you click after launching Dreamweaver causes the **Morello Login** dialog box to appear (Figure 104). Enter the same user ID and password that you use for Morello.

While attempting to log in, you may see the message "A connection with the server could not be established". This means that the servlet `MSServlet` is not running. Contact your system administrator.
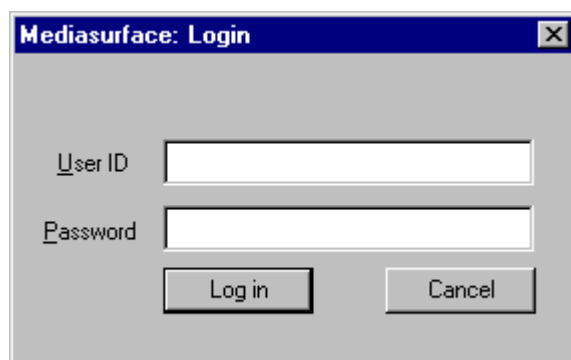
Figure 104. Logging in to Morello from Dreamweaver
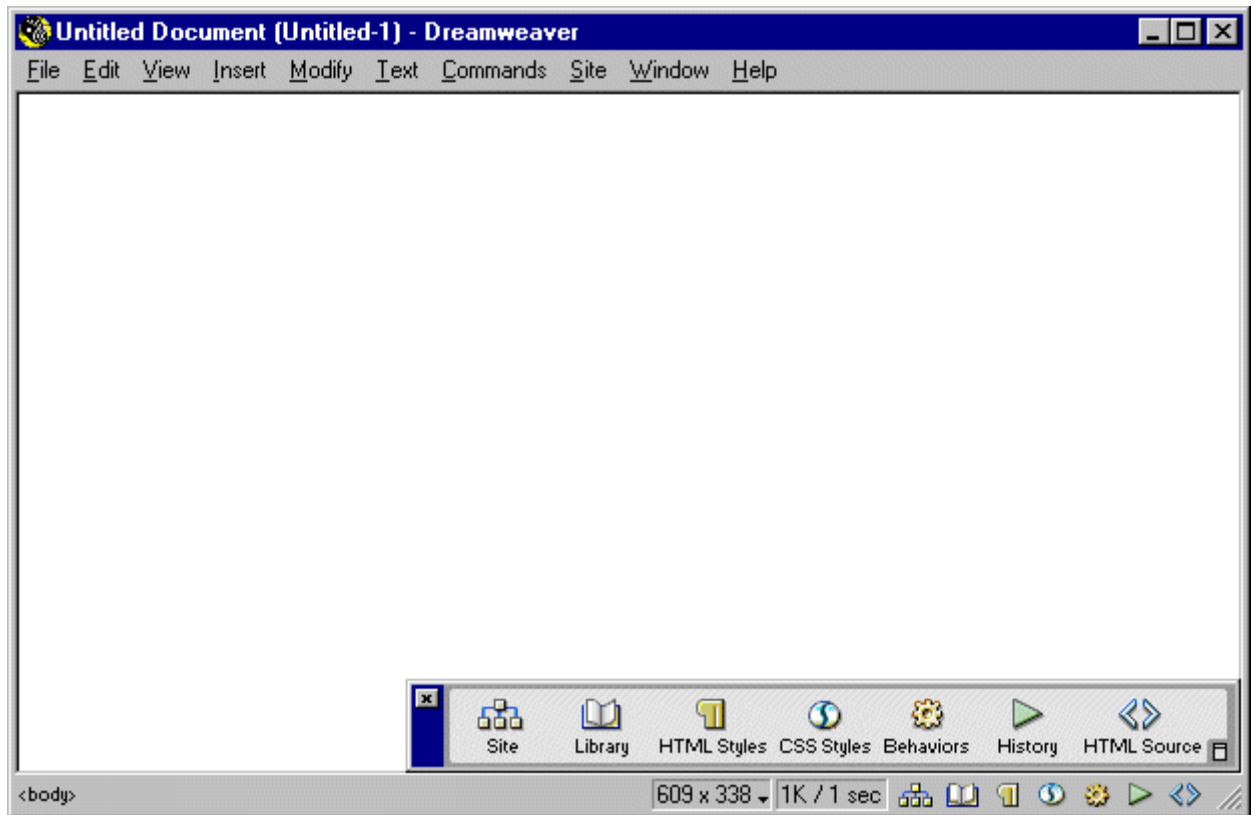
Figure 105. Dreamweaver main window

10.6 Logging out of Morello from Dreamweaver

To log out from Dreamweaver:

1. On the Dreamweaver menu bar, click **File**.

2. In the dropdown menu, click **Logout from Morello**.

   A message is displayed, confirming that you are logged out.

10.7 Automatic logging out

While you are logged in to Morello from Dreamweaver, it is possible that you could be automatically logged out of Morello. This happens if there is a period during which no Morello commands were executed. The duration of the period of inactivity is specified by your system administrator in the Dreamweaver properties file on the server.

There is no visible indication that you have been logged out. However, if you try to execute a Morello command, the login dialog box will appear, so you can simply log in again.

If you close Dreamweaver without logging out from Morello, you will be logged out automatically after the specified period of inactivity. If you relaunch Dreamweaver before the specified period has elapsed, you will find that you can continue using Morello commands without re-logging in.

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10.8   Working with Dreamweaver system information

10.8.1 Editing Morello settings

To view and edit the Morello configuration settings:

1.   In the menu bar, click **Edit**.

2.   In the dropdown menu, click **Morello Settings**.

(If this is the first Morello command that you have invoked, the **Morello Login** dialog box appears (Figure 104, page 123). Specify the login details, and click **Log in**.)

The **Configuration Settings** dialog box appears (Figure 106).

3.   Specify details and click **OK**.
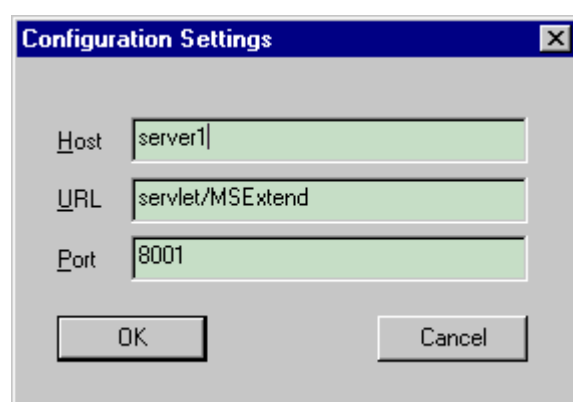
Figure 106. Editing Morello settings

Host	Host name of the server that `MSServlet` is running on.
URL	The URL that `MSServlet` is running on. This is defined in the servlet initialization arguments.
Port	Port number that `MSServlet` is running on.

Description of the Configuration Settings dialog box

10.8.2 Removing Morello locks

If you open a component or template in Dreamweaver, the component or template is *locked*. Until the lock is released, no other user can edit or delete that component or template.

The lock remains until you close the component or template using one of the methods discussed in "Saving and closing in Dreamweaver", page 125. If you close the component or template by any other method (for example, by simply closing Dreamweaver), the lock remains.

To remove any locks:

1.   On the Dreamweaver menu bar, click **File**.

2.   In the dropdown menu, click **Remove Morello Locks**.

You are informed that there are no locks.

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or

The **Select locks** dialog box opens (Figure 107), displaying all current locks.

3. Select the locks that you want to remove. Click **OK**.
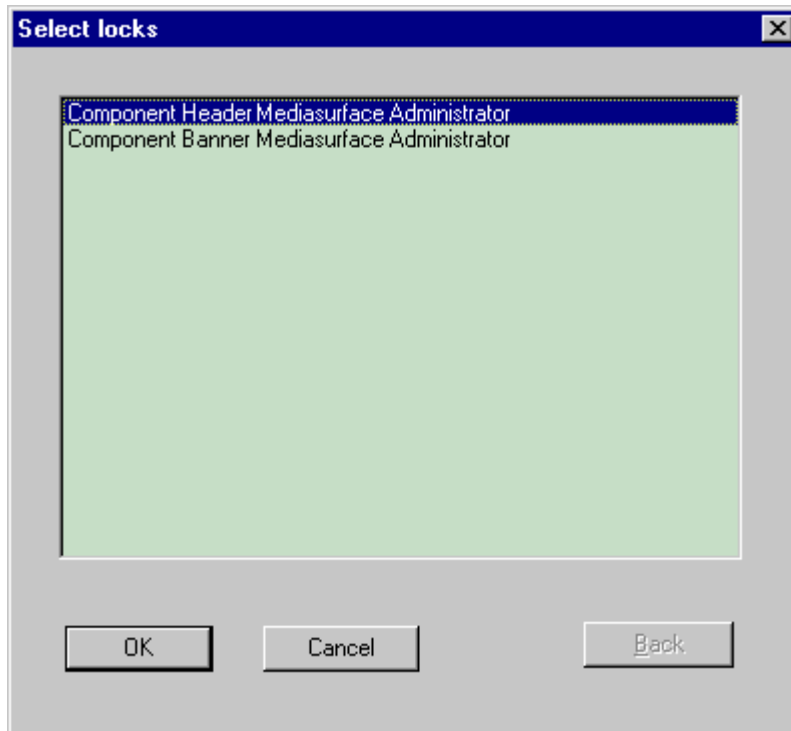
Figure 107. Removing Morello locks

10.9 What are the Morello extensions?

Dreamweaver's functionality has been extended to allow close integration with Morello. The menus that drop down from Dreamweaver's function bar contain extra functionality relative to the standard Dreamweaver. You can easily recognize these extra items: they all contain **Morello** somewhere in the text. For example, if you click **File** on the menu bar, you can see **Open Morello**, **New Morello**, and so on.

A brief description of each Morello command is given in Table 3, page 127, with a cross-reference to more detailed information.

10.10 Saving and closing in Dreamweaver

While editing components or templates, you can do any of the following:

- Save in Morello and close.
- Save in Morello without closing.
- Close without saving your changes.

Note that you can use the standard Dreamweaver commands **Save**, **Save As**, and **Save All** to save private copies of components or templates. These commands will not save to Morello.

If you plan to edit a component or template over several days, you can preserve the lock by saving to your hard disk using **Save** or **Save As**. Then simply close Dreamweaver.

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To close the component or template without saving changes:

1. On the Dreamweaver menu bar, click **File**.

2. In the dropdown menu, click **Close in Morello**.

   The template or component closes. Any changes since your last save will be lost. The lock on the component or template is released (see "Removing Morello locks", page 124).

To save the component or template in Morello without closing:

1. On the Dreamweaver menu bar, click **File**.

2. In the dropdown menu, click **Save in Morello**.

   Any changes are saved. The template or component remains open, so you can continue making changes. The lock on the component or template remains (see "Removing Morello locks", page 124).

To save the component or template in Morello and close:

1. On the Dreamweaver menu bar, click **File**.

2. In the dropdown menu, click **Save in Morello and close**.

   Any changes are saved. The template or component is closed. The lock on the component or template is released (see "Removing Morello locks", page 124).

10.11 Refreshing Morello from Dreamweaver

This command reloads the current component or template from the database. This is useful if you want to discard any unsaved changes from the current component or template and start again.

You can change a component in a different Dreamweaver window (or in Morello), and save the changes to the database. Then return to the current component or template, use the Refresh Morello command, and the changes are reflected in the current component or template.

To refresh Morello from Dreamweaver:

1. On the Dreamweaver menu bar, click **File**

2. Click **Refresh Morello**

   The current component or template is refreshed from the database.

Menu bar command	Menu item	Sub-item	Description	Cross-reference
File	Open Morello	Template	Opens an existing Morello template for editing.	"Creating and editing templates", on page 135.
		Component	Opens an existing Morello template for editing.	"Editing an existing component", page 132
	New Morello	Template	Creates a new Morello template.	Do not use. Use Morello "Working with templates", page 92
		Component	Creates a new Morello component.	"Creating a new component", on page 131
		Category	Creates a new Morello category.	"Creating a new component category", page 128

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	Delete Morello	Components	Deletes a Morello component.	"Deleting a component", page 133
		Categories	Deletes a Morello category.	"Deleting a component category", page 129
	Download Multimedia Items		Downloads multimedia items to your local disk.	"Downloading multimedia items in Dreamweaver", page 139
	Remove Morello Locks		Removes locks that are created when you are editing a component or template.	"Removing Morello locks", page 124
	Refresh Morello		Reloads the current component or template from the database.	"Refreshing Morello from Dreamweaver", page 126
	Close in Morello		Closes the current component or template without saving changes.	"Saving and closing in Dreamweaver", page 125
	Logout from Morello		Allows you to log out from the Morello servlet.	"Logging out of Morello from Dreamweaver", page 123
	Save in Morello		Saves the component or template to Morello. Does not close the component or template.	"Saving and closing in Dreamweaver", page 125
	Save in Morello and Close		Saves the component or template to Morello. Closes the component or template.	"Saving and closing in Dreamweaver", page 125
Edit	Morello Settings		Allows you to edit Morello configuration settings.	"Editing Morello settings", page 124
View	Morello	Template Attributes	Allows you to edit template attributes.	"Editing template attributes", on page 138
		Component Attributes	Allows you to edit component attributes.	"Editing component attributes" page 134
Insert	Morello		Allows you to insert Perl, fields, components, copies of components, and composite types in templates.	"Inserting objects into components or templates", page 140
Help			Displays online help for Morello.	"Getting Help", page 121

Table 3. Dreamweaver - extra menu commands for Morello

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10.12 Working with categories

10.12.1   Creating a new component category

You can create new categories for components. Categories allow you to group similar components. When you create a component , you must specify a category for that component. This implies that categories must be created before components.

For information on components and categories, see "Understanding components and categories", page 14. For information on the correct sequence for creating Morello elements, see "What sequence do you use to create Morello elements?", page 15.

To create a new category:

1.   On the Dreamweaver menu bar, click **File**, **New Morello**, **Category**.

The **Select a Site** dialog box opens (Figure 108). This dialog box lists all your Morello sites.
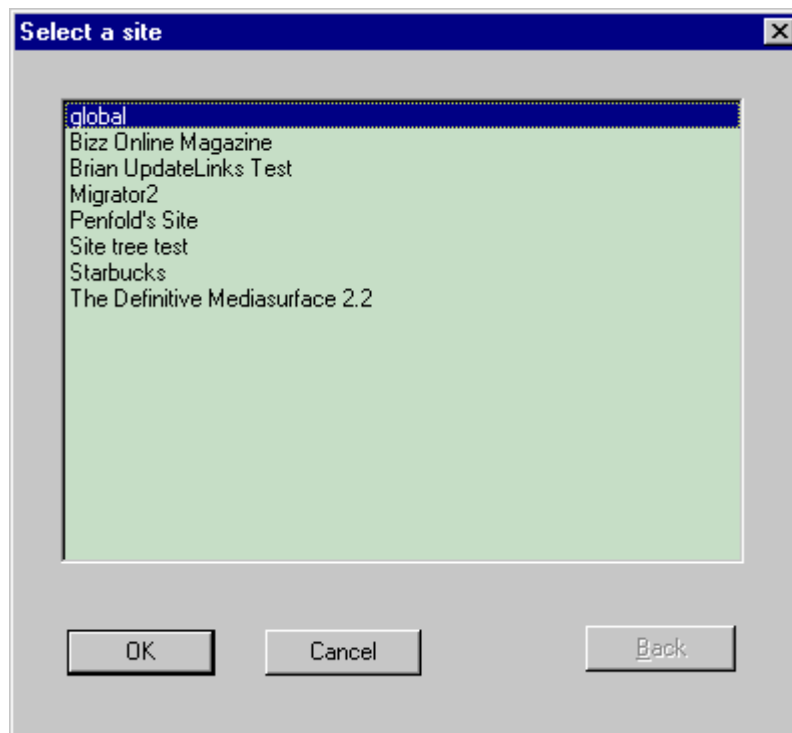
Figure 108. List of current Morello sites

2.   Select the site for which you want to create a category, or select **global**. Click **OK**.

The **Enter a New Category** dialog box opens (Figure 109).

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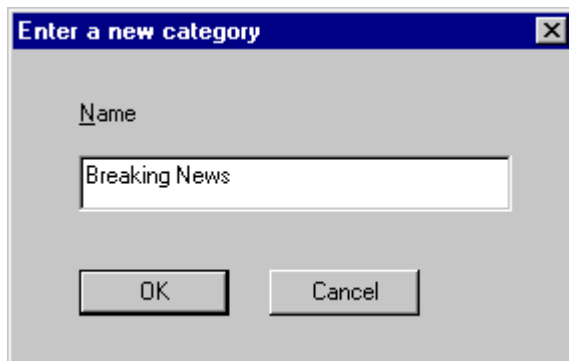
Figure 109. Naming a new category

     3.   Enter a unique name for the category. Click **OK**.

          Dreamweaver responds with a message that the new category was created.

10.12.2   Editing a component category

You cannot edit the name of a category in Dreamweaver. Use Morello (see "Displaying global and site components", page 83).

10.12.3   Deleting a component category

You can delete a Morello category if it contains no components.

To delete a category:

     1.   On the Dreamweaver menu bar, click **File**, **Delete Morello**, **Categories**.

          The **Select a Site** dialog box opens (Figure 108, page 128), listing all your Morello sites.

     2.   Select the site in which you want to delete a category, or click **global**. Click **OK**.

          The **Select Categories** dialog box opens (Figure 110).

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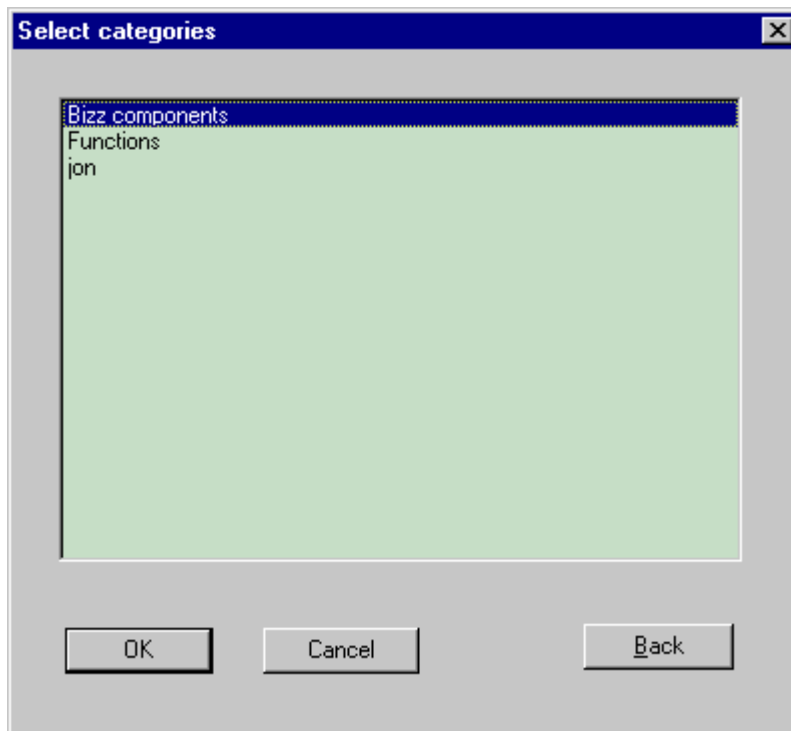
Figure 110. List of current Morello categories

3. Select the categories that you want to delete. Click **OK**.

   You are asked to confirm the deletion.

4. Click **OK**.

   If the category contains components, you are notified and asked to delete the components first.

5. Click **OK**.

10.13 Working with components

You can create new components and edit existing components. Components are frequently-used blocks of code that you can insert into templates, and into other components. For example, you can insert HTML, Perl, and Javascript. If you want to change a component, you only need to change the component once. Any template or component containing that component is changed.

For further information on components, see "Understanding components and categories", page 14.

The Dreamweaver integration identifies Morello components by delimiting them with a descriptive comment tag:

```
<!--MSTEMPLATE view="home" viewid="11803" item="HomePage" itemid="1204"
site="Demo Site" siteid="101" pagedebug="false" dynamic="false"
mediatype="text/html" charset="" privatecachetime="0" publiccachetime="0"
revision="2"--><html>
<!--/MSTEMPLATE-->
```

Remember to ensure that components are self-contained. Although this is not so important when working entirely within the Morello component editor, Dreamweaver tries to complete missing tags. It is strongly recommended that any opening tags are also closed within the component and contain complete tables wherever possible.

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10.13.1　Creating a new component

While creating a component, you are asked to specify a category. If a suitable category does not yet exist, you can specify any existing category for the component. Later, in Morello, you can change the category for the component (refer to "Working with components", page 84).

To create a new component:

1.　On the Dreamweaver menu bar, click **File**, **New Morello**, **Component**.

　The **Select a Site** dialog box opens (Figure 108, page 128). This dialog box lists all your Morello sites.

2.　Select the site for which you want to create a component. To create a global component, select **global**. Click **OK**.

　The **Select a Category** dialog box opens (Figure 109, page 129).
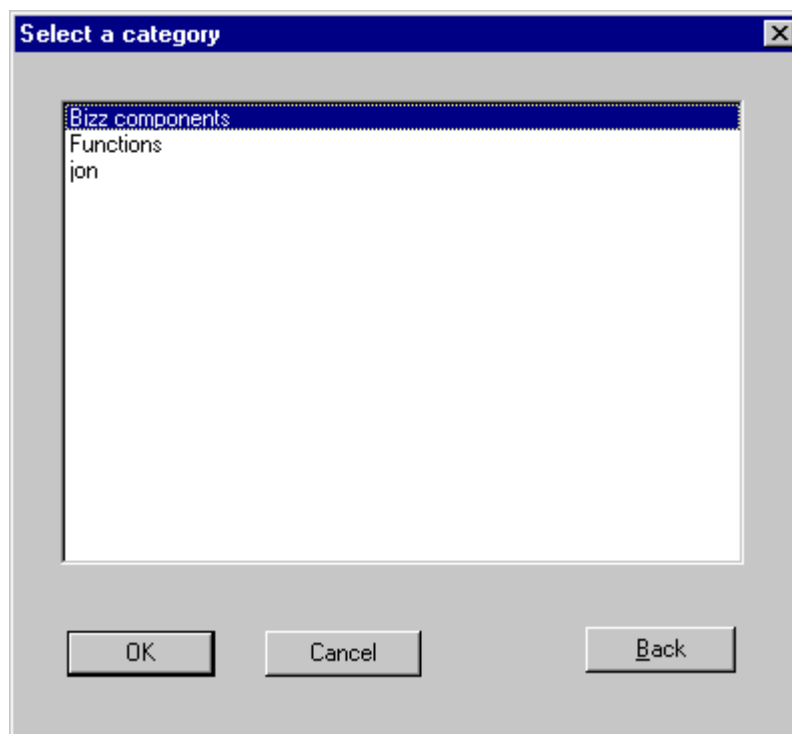
Figure 111. List of current Morello categories

3.　Select the category for which you want to create a component. Click **OK**.

　The **Enter a new component** dialog box opens (Figure 112).

MEDIASURFACE
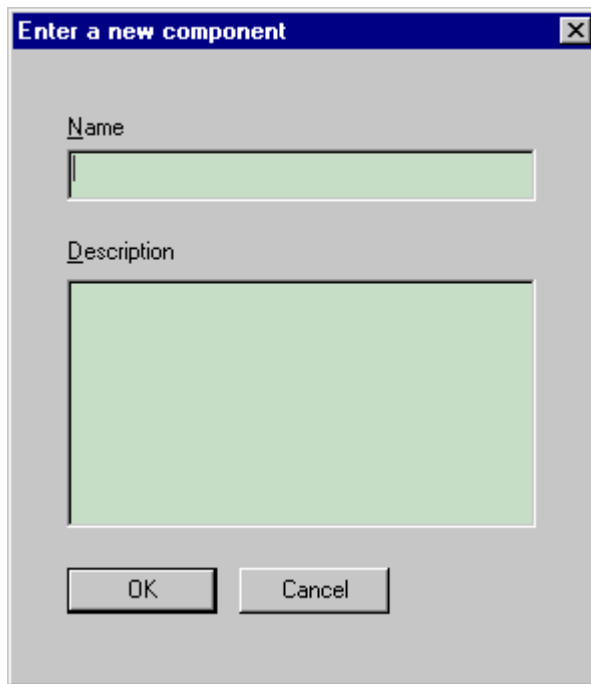
Figure 112. Creating a new component

4. Enter a unique name and description for the new component. Click **OK**.

An empty component is displayed in the Dreamweaver working area.

10.13.2   Editing an existing component

To edit an existing component:

1. On the Dreamweaver menu bar, click **File**, **Open Morello**, **Component**.

The **Select a Site** dialog box opens (Figure 108, page 128). This dialog box lists all your Morello sites. (For information on access privileges, see "Granting administration access rights to a group", page 49, and "Granting administration access rights to a user", page 57.)

2. Select the site for which you want to edit a component. To edit a global component, select **global**. Click **OK**.

The **Select a Category** dialog box opens (Figure 111, page 131). This dialog box lists all Morello component categories for the selected site.

3. Select the category containing the component that you want to edit. Click **OK**.

The **Select a Component** dialog box appears (Figure 113), listing all the components in the selected category.

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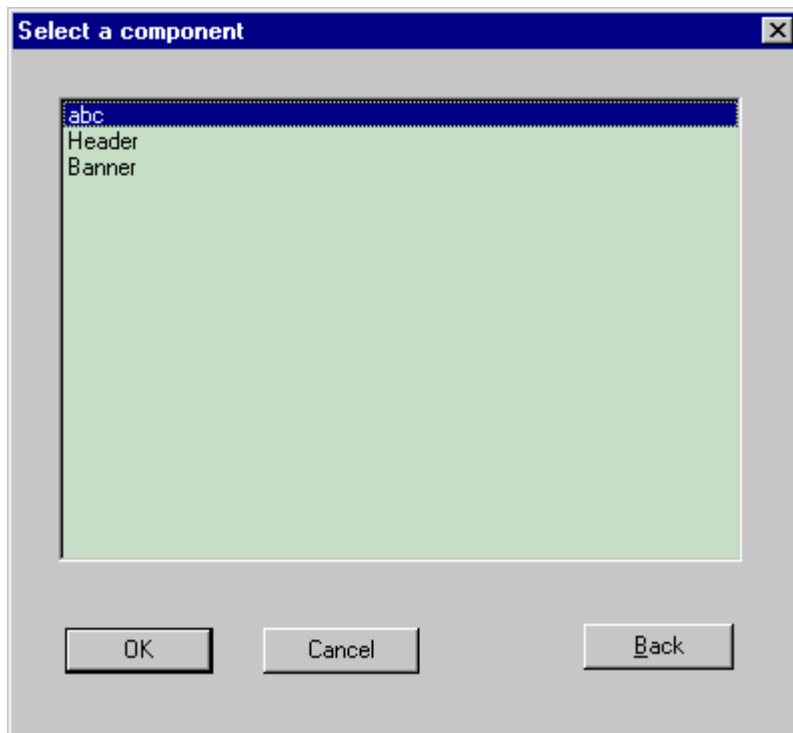
Figure 113. Selecting a component

4.   Select the component that you want to edit. Click **OK**.

The selected component is displayed in the Dreamweaver working area.

10.13.3   Deleting a component

To delete a component:

1.   On the Dreamweaver menu bar, click **File**, **Delete Morello**, **Components**.

The **Select a Site** dialog box opens (Figure 108, page 128). This dialog box lists all your Morello sites.

2.   Select the site for which you want to delete a component, or select **global**. Click **OK**.

The **Select a Category** dialog box opens (Figure 109, page 129). This dialog box lists all Morello component categories for the selected site.

3.   Select the category containing the component that you want to delete. Click **OK**.

The **Select Components** dialog box appears (Figure 114), listing all the components in the selected category.

4.   Select the components that you want to delete. Click **OK**.

You're asked to confirm the deletion.

5.   Click **OK**.

You are informed how many components were deleted.

MEDIASURFACE
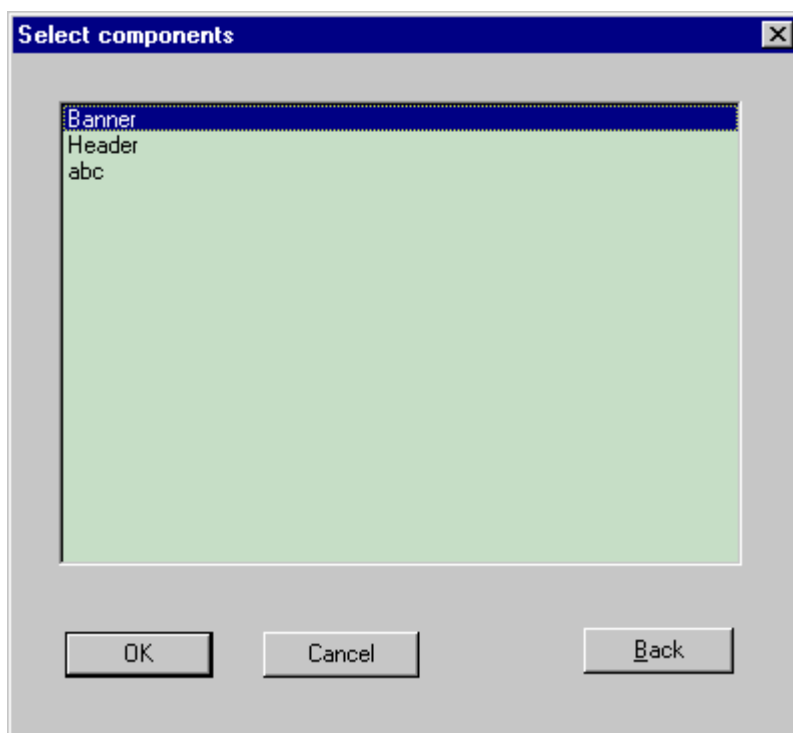
Figure 114. Selecting components

10.13.4   Editing component attributes

You can change the component name and description, server refresh time, and specify whether the component can be used or copied to another component or template.

To use this command, you must have a component open.

To edit component attributes:

1.   On the Dreamweaver menu bar, click **View**

2.   Click **Morello, Component Attributes**

The **View/Change Component Attributes** dialog box opens (Figure 115).

3.   Edit the required values and click **OK**.

4.   To save these changes in Morello, click **File**, **Save in Morello**
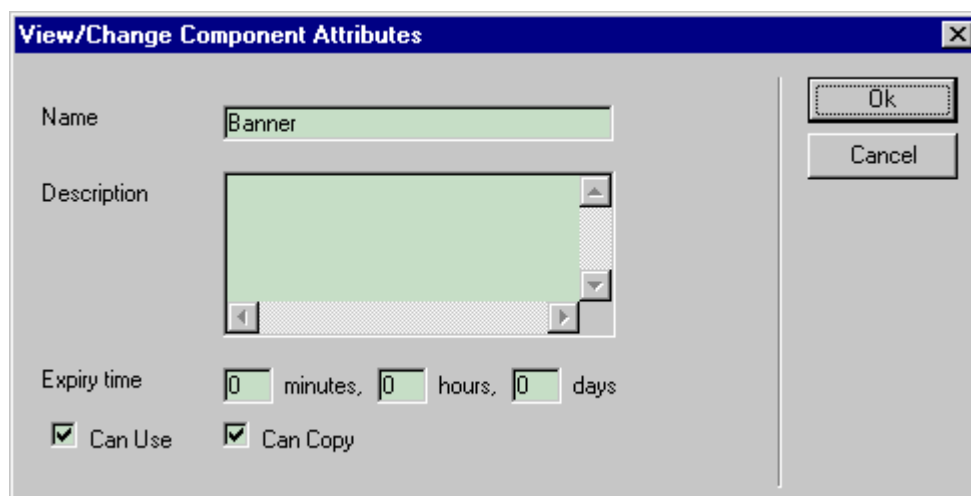
Figure 115. Editing component attributes

Name	Name of the component.
Description	Description of the component.
Expiry time	Length of time the content server periodically refreshes the component. If any changes are made to the component, the changes are not evident until the expiry time has elapsed.
Can Use	When checked, allows you to *use* the component in other components or templates.
Can Copy	When checked, allows you to *copy* the component to other components or templates.

Description of the View/Change Component Attributes dialog box

10.14 Working with views

To add, edit, or delete views, use the Morello functionality (see "Working with global views", page 88, and "Working with site views", page 89).

For further information on views, see "Understanding views and templates", page 5.

10.15 Working with templates

Templates are used to implement views. Dreamweaver's WYSIWIG editor includes all the features of the Morello template editor (see "Working with templates", page 92).

For further information on templates, see "Understanding views and templates", page 5.

There are a couple of things to note:

1. Creating a new Morello template in Dreamweaver also creates a new view.
2. A new template in Dreamweaver cannot be saved directly into Morello. You must create an empty template in Morello and copy and paste into it.

10.15.1 Creating and editing templates

Before we give detailed instructions on creating and editing templates, here is a summary:

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To create a new template from a new view:

1. On the Dreamweaver menu bar, click **File**, **New Morello**, **Template**.

   The **Select a Site** dialog box opens (Figure 116). This dialog box lists all your Morello sites.

2. Continue at step 3, following.

To create a template from an existing view, or to edit a template:

1. On the Dreamweaver menu bar, click **File**, **Open Morello**, **Template**.

   The **Select a Site** dialog box opens (Figure 116). This dialog box lists all your Morello sites.

2. Continue at step 3, following.
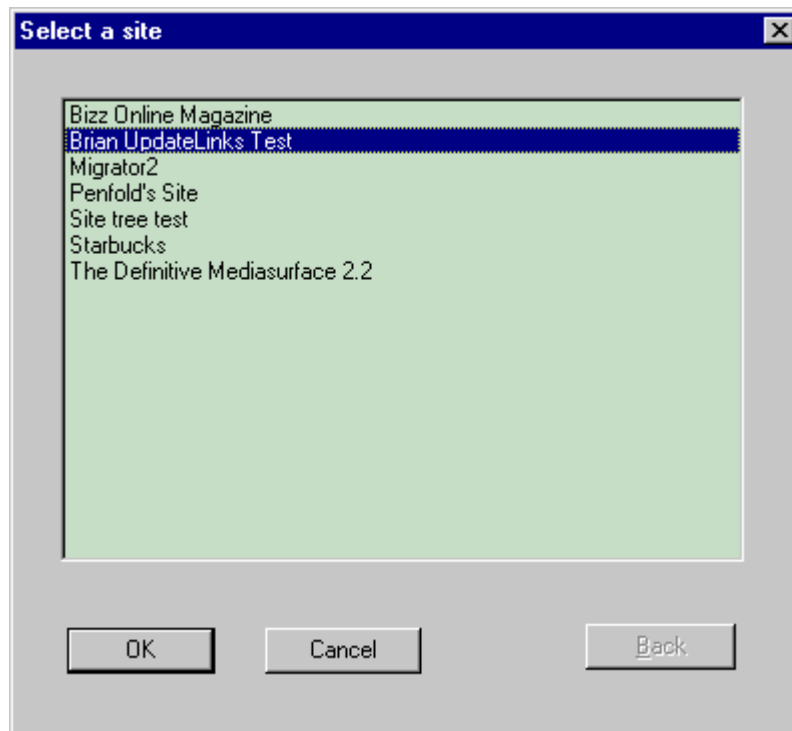
Figure 116. Selecting a site

3. Select the site for which you want to create or edit a template. Click **OK**.

   The **Select an item type** dialog box appears, listing all the item types for your selected site.
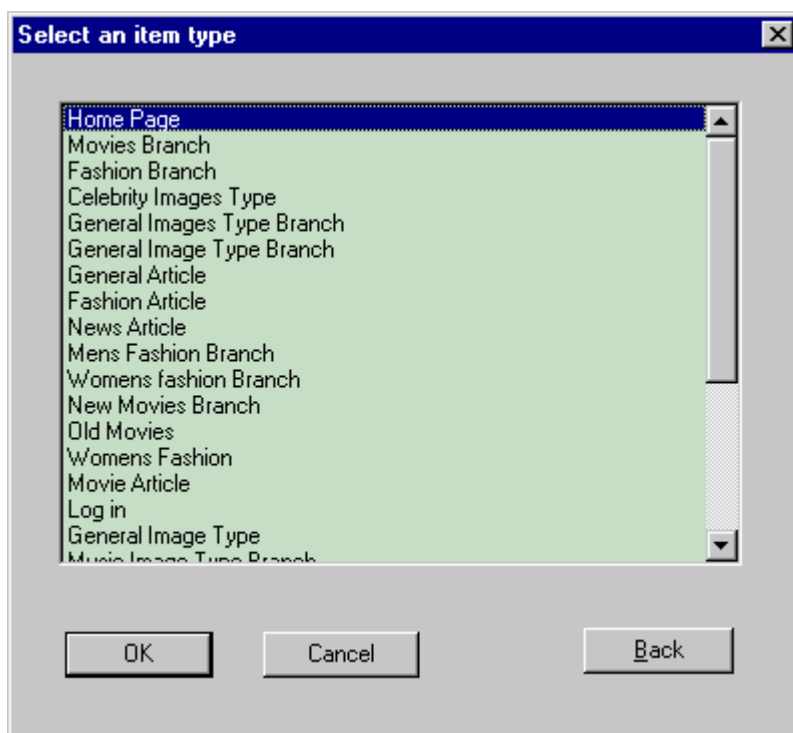
Figure 117. Selecting an item type

4. Select the item type for which you want to create or edit a template. Click **OK**.

The **Select a view** dialog box appears (Figure 118), listing all the views for your selected item type.
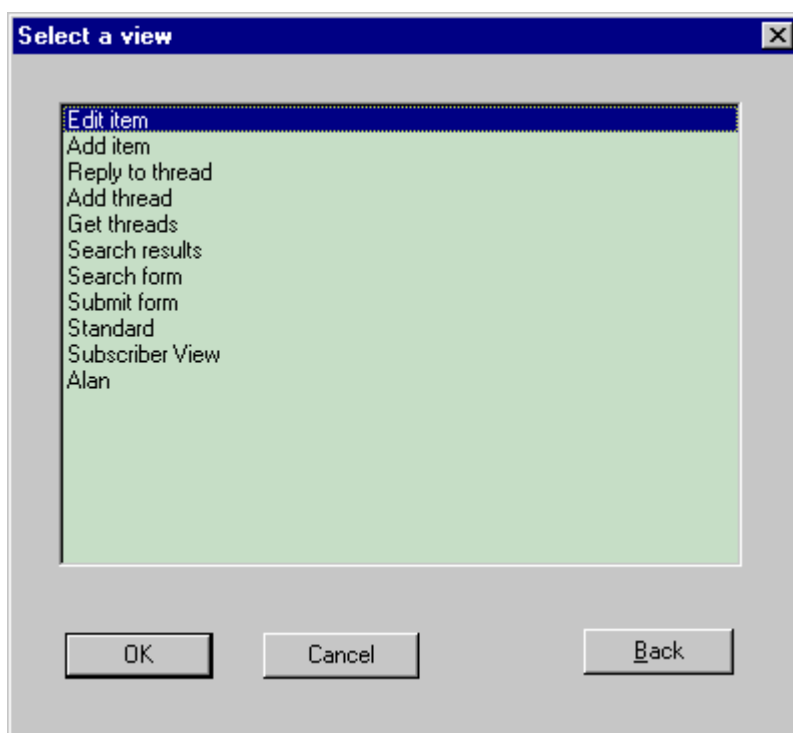
Figure 118. Selecting a view

5.   Select the view. Click **OK**.

If you are creating a new template, an empty template is opened in the Dreamweaver working area. If you are editing an existing template, it appears in the working area.

Important: When a new view is added to Morello it does not automatically become available to users. Use the Content Rules Console to update the group access properties for those groups you want to have access to the new view. You can test a template by granting access only to a group to which you belong.

10.15.2   Deleting a template

There is no functionality to delete templates in Dreamweaver. Use the Morello functionality (see "Displaying templates", page 90) to delete both templates and views that are no longer required.

10.15.3   Editing template attributes

You can edit template characteristics such as cache times, default media type, and enable and disable page debugging. To use this command, you must have a template open.

To edit template attributes:

1.   On the Dreamweaver menu bar, click **View**

2.   Click **Morello, Template Attributes**

The **View/Change Template Attributes** dialog box opens (Figure 119).

3.   Edit the required values and click **OK**.

4.   To save these changes in Morello, click **File**, **Save in Morello**
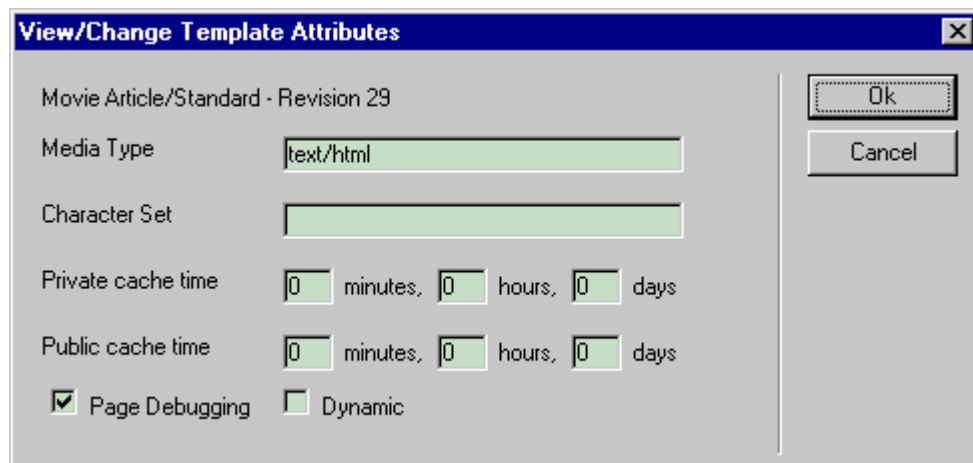
Figure 119. Editing template attributes

Media Type	The default media type for the item type that the current template is associated with.
Character Set	For non-Latin characters, you must specify a character set.
Private Cache Time	The period of time that the item type will be cached within a proxy server. The default setting for all item types is one day.
Public Cache Time	The period of time that the item type will be cached within your browser. The default setting for all item types is one day.
Page Debugging	When enabled, page debugging helps you to find errors in the template.
Dynamic	When checked, specifies that when an item expires in the cache it should always be refreshed from the content server. Otherwise, the item is refreshed only if it has changed.

Description of the View/Change Template Attributes dialog box

10.16 Downloading multimedia items in Dreamweaver

You can download multiple multimedia items from the database to your local disk. This enables you to insert these items into templates and components. From the selection box that appears, select a Morello site.

To download multimedia items in Dreamweaver:

1.   On the Dreamweaver menu bar, click **File**, **Download Multimedia Items**.

       The **Select a Site** dialog box opens (Figure 116), listing all your Morello sites.

2.   Select the site whose multimedia items you want to download. Click **OK**.

The Select multimedia items dialog box opens.
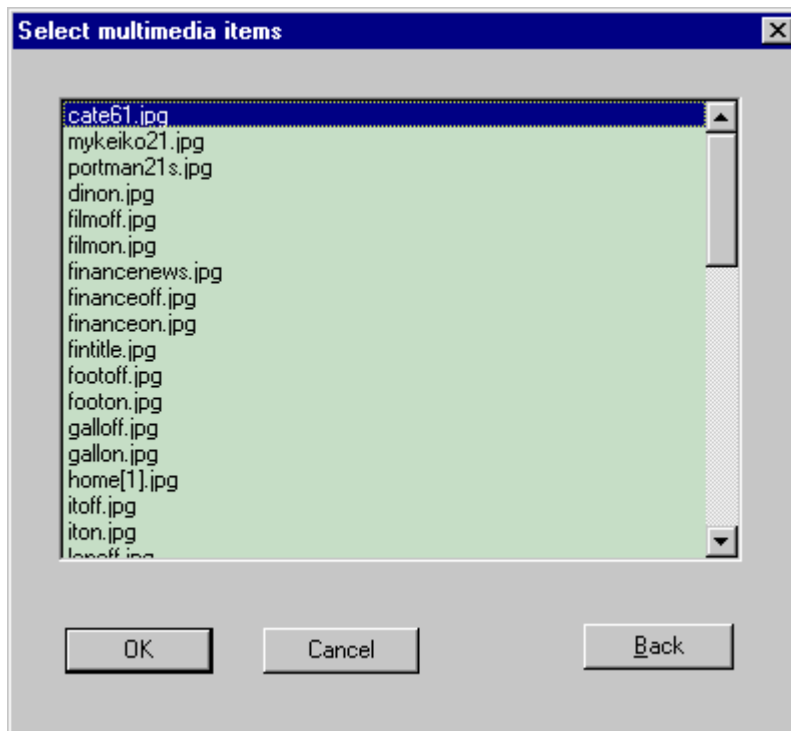
Figure 120. Selecting multimedia items

3.   Select the site whose multimedia items you want to download. Click **OK**.

The Select multimedia items dialog box opens.

4.   Select the multimedia items that you want to download. Click **OK**.

The selected items are downloaded to your hard disk. You can insert these items into templates (refer to "Inserting objects into components or templates", page 140).

Note that you do not need to specify a target directory to accept the downloaded files. They are stored in the default Dreamweaver directory. This can be set in the local folder of the Dreamweaver "Site files" screen. When you later insert a multimedia item into a template, Dreamweaver knows which directory to search.

Note: Images can only be downloaded to a local file store using Dreamweaver. Images can only be uploaded using the Content Rules Console or through a browser-based administration screen. Care is also required with the naming conventions. Multimedia items are stored with a long descriptive name and a short 'server' name. The long name appears in the box in Figure 120 above, but the item will be saved under the short name and will have the same directory structure it had in the Morello site. It is therefore advisable to import multimedia items with the same title for both short and long names without spaces and including the file extensions, e.g. Name = mediasurface_driven.gif and Short Name = mediasurface_driven.gif. Note that the use of the Multiple Multimedia import function (see "Adding multiple multimedia items", on page 87) creates identical short and long names.

10.17 Inserting objects into components or templates

You can insert the following into components or templates:

▪   Perl

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- Fields

- Components

- Copies of components

- Composite types

There are two ways to insert these. You can use the Insert command from the Dreamweaver menu bar, or you can use the objects palette.

If you only want to insert one thing, the Insert command is probably quicker. If you want to insert several similar things, the objects palette is quicker. You should experiment with both.

10.17.1   Displaying the Morello objects palette

To display the objects palette:

1. On the Dreamweaver menu bar, click **Window**, **Objects**

    The **Objects** palette appears.
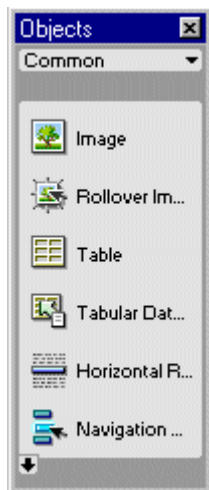
Common Objects palette

2. On the palette dropdown menu, click **Morello**

    The **Objects** palette redisplays, with the same five objects that you saw previously in the **Insert**, **Morello** menu.

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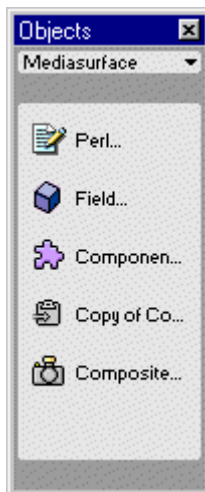
Common Objects palette

10.17.2   Using the Insert command

To insert Perl into a component or template:

1.   Place your cursor at the position where you want to insert the field.

2.   On the Dreamweaver menu bar, click **Insert**, **Morello**, **Perl**

or

In the Morello objects palette, click **Perl**.

The **Insert Perl** dialog box opens (Figure 121).
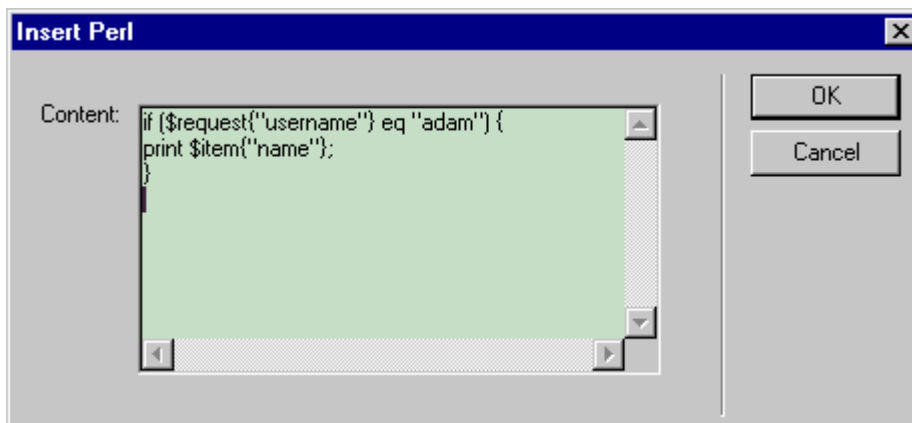
Figure 121. Inserting Perl

3.   Type your Perl code and click **OK**.

You can cut and paste from any source, including other Windows applications.

An icon is inserted at the cursor location (Figure 122). This icon is a placeholder for the results of the Perl script, which will eventually appear on the Web page.

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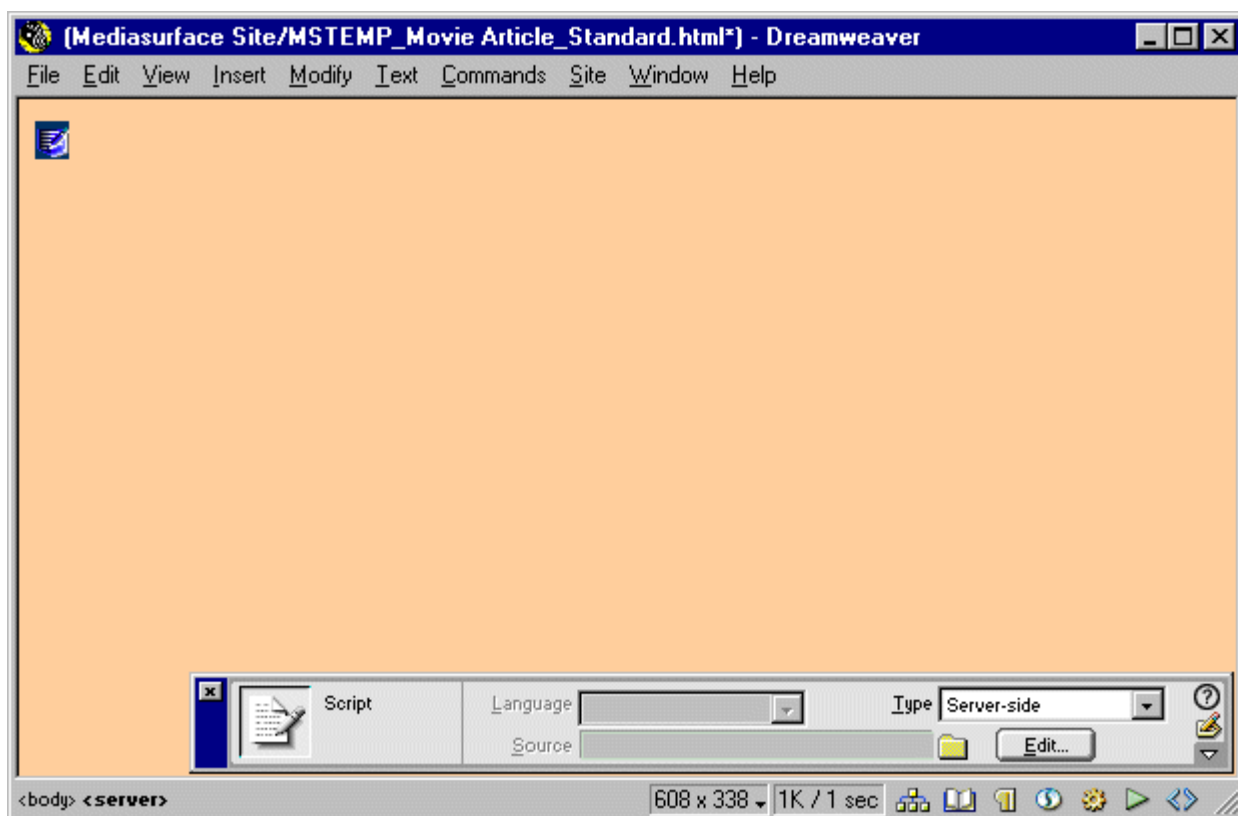
Figure 122. Inserted Perl script represented by icon

4. To edit the Perl code, click on the icon.

    The script palette is displayed (foot of Figure 122).

5. At the lower right of the palette, click **Edit**.

    The **Script Properties** dialog box is displayed (Figure 123). Edit the script and click OK.

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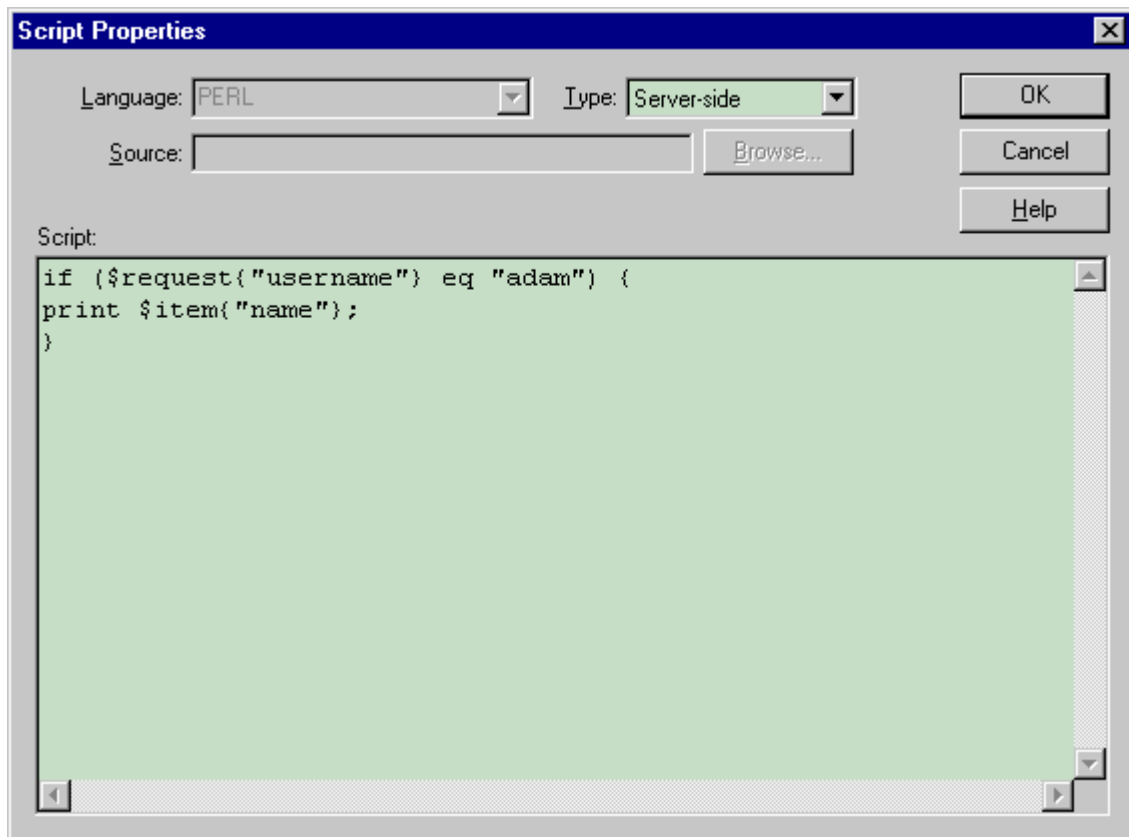
Figure 123. Editing the Perl script

To insert a field into a template:

1. Place your cursor at the position where you want to insert the field.

2. On the Dreamweaver menu bar, click **Insert**, **Morello**, **Field**

    or

    In the Morello objects palette, click **Field**.

    The **Select a field** dialog box opens (Figure 124). The dialog box lists all the fields associated with the item type that is associated with the current template.

3. Select the field that you want to insert. Click **OK**.

    The field is inserted at the cursor position. For example, if you select **Section1** in Figure 124, the following is inserted in the template:

    `'$item{'section_1'}'`
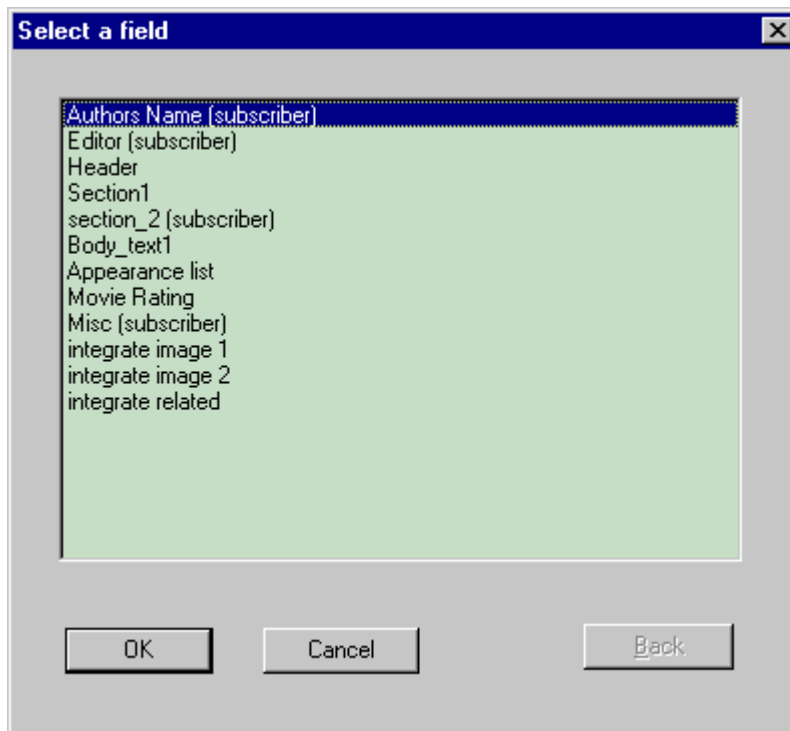
Figure 124. Inserting a field in a template

To insert a component, or a copy of a component, into another component or template:

If you *insert* a component, and then change the component, all instances of that component are changed. On the other hand, if you *copy* a component, the copy loses all links to the original: changes to the original do not affect the copy.

1.   Place your cursor at the position where you want to insert the component, or copy.

2.   On the Dreamweaver menu bar, click **Insert**, **Morello**, **Component** or **Copy of Component**

    or

    In the Morello objects palette, click **Component** or **Copy of Component**.

    The **Select a site** dialog box opens. The dialog box lists has only two entries: **global** or the site associated with the current component or template.

3.   Select your current site, or **global**. Click **OK**.

    The **Select a category** dialog box opens. If you selected **global** in the **Select a site** dialog box, only global categories are listed. If you selected your current site in the **Select a site** dialog box, only categories associated with your current site are listed.

4.   Select a category. Click **OK**.

    The **Select a component** dialog box opens.

5.   Select a component. Click **OK**.

    The selected component, or copy, is inserted at the cursor position.

To insert a composite type into a template:

1. Place your cursor at the position where you want to insert the composite type.

2. On the Dreamweaver menu bar, click **Insert**, **Morello**, **Composite Type**

   or

   In the Morello objects palette, click **Composite Type**

   The **Select a composite type** dialog box opens (Figure 125), listing all the composite types associated with the item type that is associated with the current template.
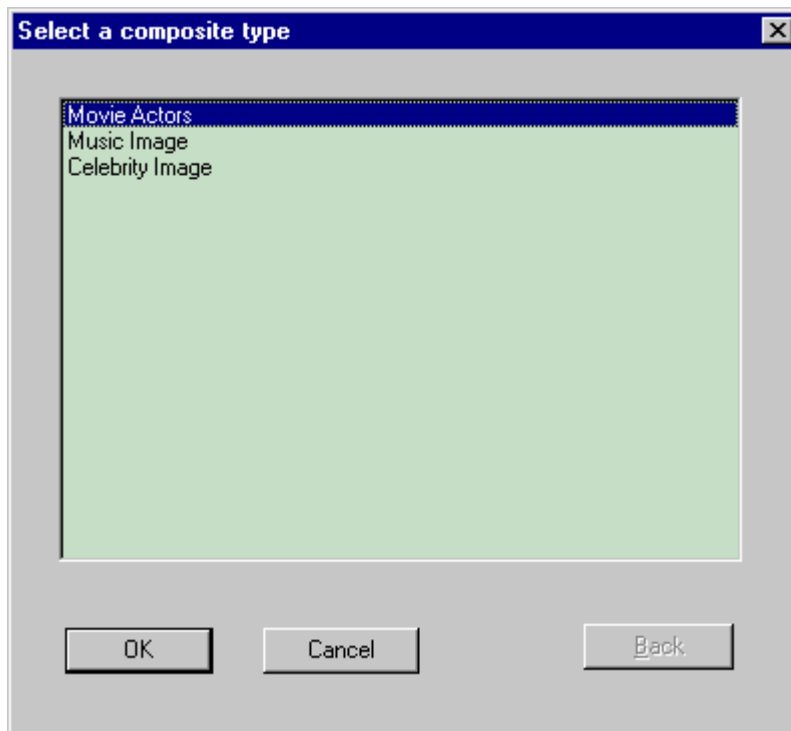
Figure 125. Inserting a composite type in a template

3. Select a composite type. Click **OK**.

   The Perl code to insert the selected composite type is inserted at the cursor position. For example, if you selected Movie Actors in Figure 125, the following Perl code is inserted at the cursor:

   ```
   'str_inlines(undef, undef, undef, undef, undef, 'Movie Actors')'
   ```

   You can see an example of this code in Figure 4, page 5.

   When using the 'str_inlines' function the image will not appear in the Dreamweaver view. Attributes of the image can be manipulated using the Code Inspector view to add the appropriate parameters (refer to the *Template Programming Guide* for further detail):

   ```
   'str_inlines(undef, '<img src="$url" border=0 color=white hspace=1
   align="left">', undef, undef, undef, 'Movie Actors')'
   ```

   Figure 126 shows this in operation. Note that a broken image appears that can display these details and can be edited using the Properties box.

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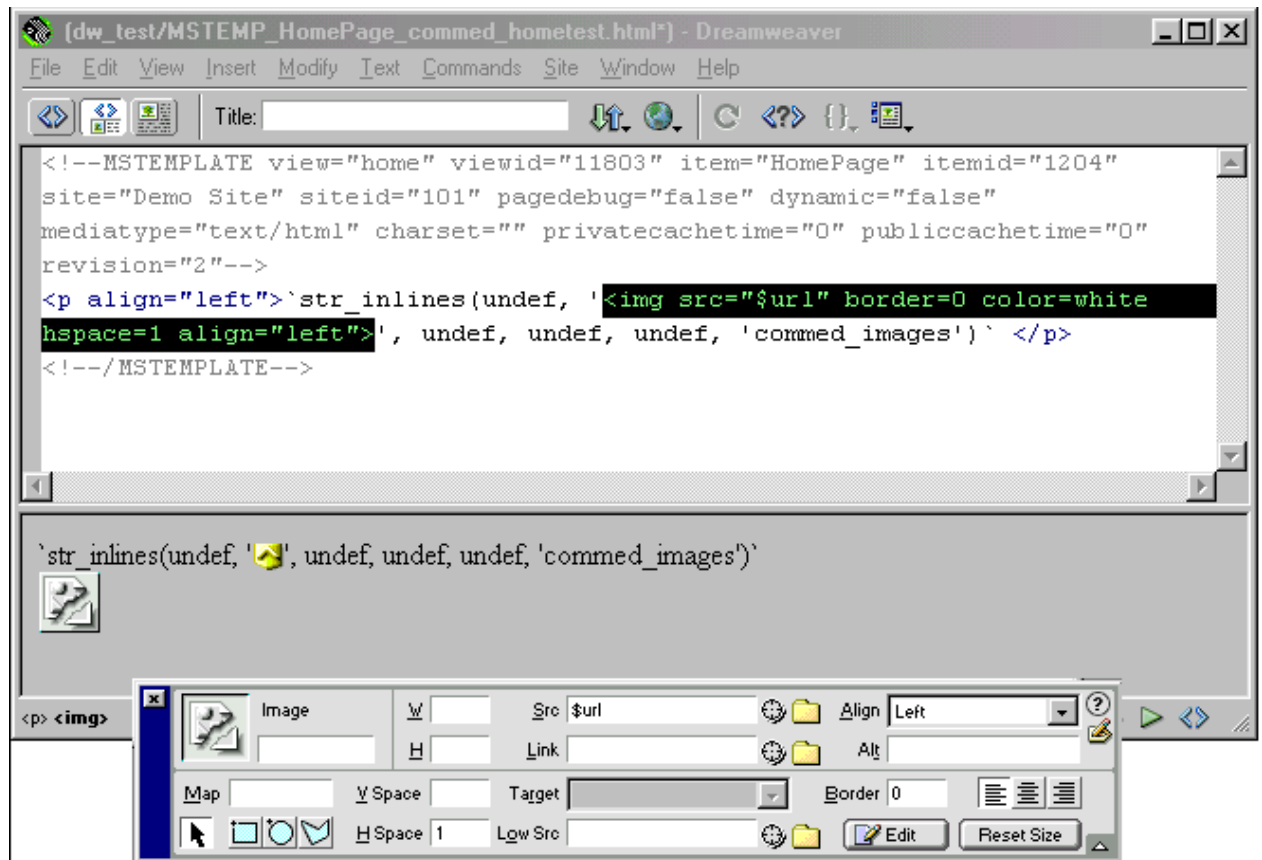
Figure 126. Editing an inline image's parameters

10.18 Getting the Most from Dreamweaver and the Design Module

Dreamweaver was designed as a WYSISYG editor for HTML pages, so it contains features that manage the integrity of HTML syntax. This leads to differences between the way designers work with Morello components and templates in Morello's own editor.

In the Morello editor, template designers usually create elements (snippets of presentation code, usually HTML) that separate components and fields, but do not necessarily ensure that the components are self-contained (for example, beginning and ending with <table> tags).

There are a number of things to consider when using Dreamweaver:

1. Templates and components originally created in Morello are not well suited to editing in Dreamweaver, particularly if they contain components. This is because (i) Dreamweaver tries to complete components that do not have HTML delimiters and (ii) The components will not be "commented" by Dreamweaver to make them easily identifiable.

2. Components or templates in which Perl code contains HTML structure will not be represented in Dreamweaver as a WYSIWYG.

3. When Dreamweaver opens a template that has been edited in Morello, multiple elements (see "Working with templates" on page 92) between components or fields are concatenated. This should not cause a problem but you must be aware that it happens.

4. Dreamweaver creates comment tags around components for identification purposes. Do not to remove or damage these on subsequent editing in Dreamweaver or the source code view of Dreamweaver.

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5. When using rollovers or other functions that require Javascript, Dreamweaver places code in the header of the HTML file. This means that it is preferable that these functions are placed in the template rather than in a component, because the latter has no HTML header.

The procedure for building new sites or templates using Dreamweaver is as follows:

1. Try to create the original layout design with strict table structures.

2. Break the design up into an overall template holder with components as sub-tables or table content. Cut and paste the components to individual files as server-side-include (SSI) files or Dreamweaver library items. SSIs are preferable for this method of working. Add the SSI files into the overall template as an Include statement to recompile the original design. You should now have a complete page consisting of one template file and a number of component files.

3. Ensure that components are self-contained: opening tags must be closed within the component. Use complete tables where possible.

4. Use the Code Inspector view in Dreamweaver to remove the '#include virtual' or '#include file' part of the tag: convert <!--#include virtual="component/date_time.inc" --> to <!--"component/date_time.inc" -->

5. You should now have a page in Dreamweaver template, with comments replacing missing components.

6. Convert the SSI components to Morello components. This can be done using Dreamweaver. If a large number of components need to be recreated, the Morello Component Editor is faster using the file import function.

Figure 127. Inserting a file into a component

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7. Create a new Morello template of the appropriate name and view. Copy the outline template to this new template.

8. At each corresponding comment point, insert the Morello component created in step 5 and remove the comment tag. Save in Morello.

Note that the resulting template can reference fields associated with the item type (using the Insert|Morello|Field function) but when adding fields to components you must write in the appropriate Perl functions from a knowledge of the appropriate field names.

11   Appendix A

This appendix describes the supported country and language names that may be used when creating a new locale.

11.1   Supported country names

The Oracle database used by Morello provides support for the countries or territories listed below. If the `setlocale` Perl API function is used then the country name for the locale must be from this list.

Note that not all the territories supported by Oracle are part of ISO-3166 and consequently some do not have an equivalent 2-character code.

Country Name	ISO-3166 2-Character Code
ALGERIA	DZ
AMERICA	US
AUSTRALIA	AU
AUSTRIA	AT
BAHRAIN	BH
BANGLADESH	BD
BELGIUM	BE
BRAZIL	BR
BULGARIA	BG
CANADA	CA
CATALONIA	
CHILE	CL
CHINA	CN
CIS	
COLOMBIA	CO
COSTA RICA	CR
CROATIA	HR
CYPRUS	CY
CZECH REPUBLIC	CZ

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Country Name	ISO-3166 2-Character Code
DENMARK	DK
DJIBOUTI	DJ
EGYPT	EG
EL SALVADOR	SV
ESTONIA	EE
FINLAND	FI
FRANCE	FR
GUATEMALA	GT
GERMANY	DE
GREECE	GR
HONG KONG	HK
HUNGARY	HU
ICELAND	IS
INDIA	IN
INDONESIA	ID
IRAQ	IQ
IRELAND	IE
ISRAEL	IL
ITALY	IT
JAPAN	JP
JORDAN	JO
KAZAKHSTAN	KZ
KOREA	KR
KUWAIT	KW
LATVIA	LV
LEBANON	LB

Country Name	ISO-3166 2-Character Code
LIBYA	LY
LITHUANIA	LT
LUXEMBOURG	LU
MACEDONIA	MK
MALAYSIA	MY
MAURITANIA	MR
MEXICO	MX
MOROCCO	MA
NEW ZEALAND	NZ
NICARAGUA	NI
NORWAY	NO
OMAN	OM
PANAMA	PA
PERU	PE
POLAND	PL
PORTUGAL	PT
PUERTO RICO	PR
QATAR	QA
ROMANIA	RO
SAUDI ARABIA	SA
SINGAPORE	SG
SLOVAKIA	SK
SLOVENIA	SI
SOMALIA	SO
SOUTH AFRICA	ZA
SPAIN	ES

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Country Name	ISO-3166 2-Character Code
SUDAN	SD
SWEDEN	SE
SWITZERLAND	CH
SYRIA	SY
TAIWAN	TW
THAILAND	TH
THE NETHERLANDS	NL
TUNISIA	TN
TURKEY	TR
UKRAINE	UA
UNITED ARAB EMIRATES	AE
UNITED KINGDOM	GB
UZBEKISTAN	UZ
VENEZUELA	VE
VIETNAM	VN
YEMEN	YE
YUGOSLAVIA	YU

11.2   Supported language names

The Oracle database used by Morello provides support for the languages listed below. If the `setlocale` Perl API function is used then the language name for the locale must be from this list.

Note that not all the languages supported by Oracle are part of ISO-3166 and consequently some do not have an equivalent 2-character or 3-character code. Some languages also only have an ISO-639-2 code.

For the 3-character code used to identify the language internally within Morello and Oracle Text, ZHT is used for Traditional Chinese and ZHS for Simplified Chinese, rather than the official ISO-639-2 code. This is following Oracle practice.

The 3-character code is used in the name of the SQL script to add a sub-lexer to enable Oracle Text to search using a language other than English. For example, to add the Danish sub-lexer, the `add_locale_dan.sql` script is run.

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Language Name	Oracle abbreviation	ISO-639-1 2-character code	ISO-639-2 3-character code
AMERICAN	us	EN	ENG
ARABIC	ar	AR	ARA
ASSAMESE	as	AS	ASM
BANGLA	bn	BN	BEN
BENGALI	bn	BN	BEN
BRAZILIAN PORTUGUESE	ptb	PT	POR
BULGARIAN	bg	BG	BUL
CANADIAN FRENCH	frc	FR	FRE
CATALAN	ca	CA	CAT
CROATIAN	hr	HR	HRV
CZECH	cs	CS	CZE
DANISH	dk	DA	DAN
DUTCH	nl	NL	DUT
EGYPTIAN	eg	EG	EGY
ENGLISH	gb		ENG
ESTONIAN	et	ET	EST
FINNISH	sf	FI	FIN
FRENCH	f	FR	FRE
GERMAN DIN	din	DE	GER
GERMAN	d	DE	GER
GREEK	el	EL	GRE
GUJARATI	gu	GU	GUJ
HEBREW	iw	HE	HEB
HINDI	hi	HI	HIN
HUNGARIAN	hu	HU	HUN

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Language Name	Oracle abbreviation	ISO-639-1 2-character code	ISO-639-2 3-character code
ICELANDIC	is	IS	ICE
INDONESIAN	in	ID	IND
ITALIAN	i	IT	ITA
JAPANESE	ja	JA	JPN
KANNADA	kn	KN	KAN
KOREAN	ko	KO	KOR
LATIN AMERICAN SPANISH	esa	ES	SPA
LATVIAN	lv	LV	LAV
LITHUANIAN	lt	LT	LIT
MALAY	ms	MS	MAY
MALAYALAM	ml	ML	MAL
MARATHI	mr	MR	MAR
MEXICAN SPANISH	esm	ES	SPA
NORWEGIAN	n	NO	NOR
ORIYA	or	OR	ORI
POLISH	pl	PL	POL
PORTUGUESE	pt	PT	POR
PUNJABI	pa	PA	PAN
ROMANIAN	ro	RO	RUM
RUSSIAN	ru	RU	RUS
SIMPLIFIED CHINESE	zhs	ZH	ZHS (See note)
SLOVAK	sk	SK	SLO
SLOVENIAN	sl	SL	SLV
SPANISH	e	ES	SPA
SWEDISH	s	SV	SWE

Language Name	Oracle abbreviation	ISO-639-1 2-character code	ISO-639-2 3-character code
TAMIL	ta	TA	TAM
TELUGU	te	TE	TEL
THAI	th	TH	THA
TRADITIONAL CHINESE	zht	ZH	ZHT (See note)
TURKISH	tr	TR	TUR
UKRAINIAN	uk	UK	UKR
VIETNAMESE	vn	VI	VIE

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